

ATTACHMENT A

TRAFFIC VOLUMES AND ADJUSTMENTS



Traffic Information at South Willard Street and Cliff Street

Vehicles at the South Willard Street - Cliff Street Intersection

Time of Day	Vehicles per 15 minute Interval
6:00 AM	60
6:30 AM	80
7:00 AM	100
7:30 AM	140
8:00 AM	185
8:30 AM	175
9:00 AM	125
9:30 AM	120
10:00 AM	90
10:30 AM	90
11:00 AM	130
11:30 AM	115
12:00 PM	125
12:30 PM	95
1:00 PM	115
1:30 PM	125
2:00 PM	135
2:30 PM	140
3:00 PM	140
3:30 PM	150
4:00 PM	185
4:30 PM	180
5:00 PM	155

Pedestrians on Cliff Street from Willard to Summit Ridge

Peak Period	Direction	Pedestrians during Peak Hours
AM Peak (7:30 - 8:30)	Uphill	0
	Downhill	1
Noon Peak (11:45 - 12:45)	Uphill	2
	Downhill	4
PM Peak (4:45 - 5:45)	Uphill	3
	Downhill	4

Vehicle Flow on Cliff Street from Willard to Summit Ridge

Peak Period	Direction	Vehicles during Peak Hours
AM Peak (7:30 - 8:30)	Uphill	91
	Downhill	48
Noon Peak (11:45 - 12:45)	Uphill	53
	Downhill	40
PM Peak (4:45 - 5:45)	Uphill	40
	Downhill	18

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Raw Count Data

	EB	WB	NB	SB	
South Willard - Cliff Street	LT	4	25	4	11
Burlington, VT	TH	12	13	278	141
9/12/2007	RT	0	5	52	4
2nd Wednesday	Enter	16	43	334	156
RSG Count	Exit	75	21	287	166
	% Trucks	0.0%	0.0%	1.8%	2.6%
	Peds	23	0	7	6
	PHF				
	Peak Hour	7:45 AM - 8:45 AM	Peak	0.80	

	EB	WB	NB	SB	
Cliff Street - Summit Ridge	LT				
09/12/07	TH				
2nd Wednesday	RT				0
	Enter	0	0	0	0
	Exit	0	0	0	0
	% Trucks				
	Peds				PHF
	Peak Hour				

	EB	WB	NB	SB	
Cliff Street - Summit/Overlake	LT	14	5	2	4
Burlington, VT	TH	2	0	12	7
9/12/2007	RT	6	20	5	17
2nd Wednesday	Enter	22	25	19	28
RSG Count	Exit	11	19	46	18
	% Trucks	0.0%	0.0%	0.0%	0.0%
	Peds	16	1	8	4
	PHF				
	Peak Hour	7:45 AM - 8:45 AM	Peak	0.87	

	EB	WB	NB	SB	
South Prospect - Cliff Street	LT	47	0	15	0
Burlington, VT	TH	0	0	149	139
9/12/2007	RT	20	0	0	27
2nd Wednesday	Enter	67	0	164	166
RSG Count	Exit	0	42	196	159
	% Trucks	0.0%	0.0%	0.0%	0.0%
	Peds	15	17	6	6
	PHF				
	Peak Hour	7:30 AM - 8:30 AM	Peak	0.76	

DHV & Annual Adjustments to
2007

ATR/CTC ID	S6D140
Location	Burlington:US7 betwSpruceSt/TowerTerrace
Poll Group	Urban
ATR/CTC Year	2006
Annual Growth	1.0%
ATR/CTC AADT	6,900
Corr. AADT	6,969
TM Count Year	2007
DHV (Equation)	n/a
DHV (K-Factor)	720
Corr. Count	585
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

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ATR/CTC Year	2006
Annual Growth	1.0%
ATR/CTC AADT	6,900
Corr. AADT	#VALUE!
TM Count Year	2nd Wednesday
DHV (Equation)	n/a
DHV (K-Factor)	#VALUE!
Corr. Count	0
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

ATR/CTC ID	S6D140
Location	Burlington:US7 betwSpruceSt/TowerTerrace
Poll Group	Urban
ATR/CTC Year	2006
Annual Growth	1.0%
ATR/CTC AADT	6,900
Corr. AADT	6,969
TM Count Year	2007
DHV (Equation)	n/a
DHV (K-Factor)	720
Corr. Count	34
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

ATR/CTC ID	S6D140
Location	Burlington:US7 betwSpruceSt/TowerTerrace
Poll Group	Urban
ATR/CTC Year	2006
Annual Growth	1.0%
ATR/CTC AADT	6,900
Corr. AADT	6,969
TM Count Year	2007
DHV (Equation)	n/a
DHV (K-Factor)	720
Corr. Count	134
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

Adjusted Raw Counts
2007

	EB	WB	NB	SB	
LT	5	31	5	14	
TH	15	16	342	174	
RT	0	6	64	5	676
Enter	20	53	411	192	676
Exit	92	26	353	204	676

	EB	WB	NB	SB	
LT	0	0	0	0	
TH	0	0	0	0	
RT	0	0	0	0	0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	17	6	2	5	
TH	2	0	15	9	
RT	7	25	6	21	116
Enter	27	31	23	34	116
Exit	14	23	57	22	116

	EB	WB	NB	SB	
LT	58	0	18	0	
TH	0	0	183	171	
RT	25	0	0	33	489
Enter	82	0	202	204	489
Exit	0	52	241	196	489

Balancing
2007

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT				4	
TH	92	44			
RT				9	150
Enter	92	44	0	13	150
Exit	96	53	0	0	150

	EB	WB	NB	SB	
LT					
TH	69	21			90
RT					90
Enter	69	21	0	0	90
Exit	69	21	0	0	90

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

Balanced Adjusted Raw
Counts
2007

	EB	WB	NB	SB	
LT	5	31	5	14	
TH	15	16	342	174	
RT	0	6	64	5	676
Enter	20	53	411	192	676
Exit	92	26	353	204	676

	EB	WB	NB	SB	
LT	0	0	0	4	
TH	92	44	0	0	
RT	0	0	0	9	150
Enter	92	44	0	13	150
Exit	96	53	0	0	150

	EB	WB	NB	SB	
LT	17	6	2	5	
TH	71	21	15	9	206
RT	7	25	6	21	206
Enter	96	52	23	34	206
Exit	82	44	57	22	206

	EB	WB	NB	SB	
LT	58	0	18	0	
TH	0	0	183	171	
RT	25	0	0	33	489
Enter	82	0	202	204	489
Exit	0	52	241	196	489

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Build
2007

South Willard - Cliff Street
 Burlington, VT
 9/12/2007
 2nd Wednesday
 RSG Count

	EB	WB	NB	SB	
LT	5	31	5	14	
TH	15	16	342	174	
RT	0	6	64	5	676
Enter	20	53	411	192	676
Exit	92	26	353	204	676

Cliff Street - Summit Ridge
 09/12/07
 2nd Wednesday

	EB	WB	NB	SB	
LT	0	0	0	4	
TH	92	44	0	0	
RT	0	0	0	9	150
Enter	92	44	0	13	150
Exit	96	53	0	0	150

Cliff Street - Summit/Overlake
 Burlington, VT
 9/12/2007
 2nd Wednesday
 RSG Count

	EB	WB	NB	SB	
LT	17	6	2	5	
TH	71	21	15	9	
RT	7	25	6	21	206
Enter	96	52	23	34	206
Exit	82	44	57	22	206

South Prospect - Cliff Street
 Burlington, VT
 9/12/2007
 2nd Wednesday
 RSG Count

	EB	WB	NB	SB	
LT	58	0	18	0	
TH	0	0	183	171	
RT	25	0	0	33	489
Enter	82	0	202	204	489
Exit	0	52	241	196	489

Closure of Street (South
Willard to Summit Ridge)
2007

Traffic Changes

	EB	WB	NB	SB	
LT	15	-31		-14	
TH	-15	-16	48		
RT		-6	-64		-82
Enter	0	-53	-16	-14	-82
Exit	-92	-16	57	-31	-82

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	-17			-4	
TH	-68	-20		4	
RT	-7			-20	-133
Enter	-92	-20	0	-21	-133
Exit	-72	-40	-17	-4	-133

	EB	WB	NB	SB	
LT	-51		-7		
TH			16	12	
RT	-22			-13	-64
Enter	-72	0	9	-1	-64
Exit	0	-20	-35	-9	-64
	-72				
	-20				

Closure - Traffic Volumes
2007

Traffic Changes

	EB	WB	NB	SB	
LT	20	0	5	0	
TH	0	0	390	174	
RT	0	0	0	5	593
Enter	20	0	395	178	593
Exit	0	10	410	174	593

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	0	6	2	1	
TH	4	1	15	12	
RT	0	25	6	1	72
Enter	4	32	23	14	72
Exit	10	4	39	18	72

	EB	WB	NB	SB	
LT	7	0	11	0	
TH	0	0	199	183	
RT	3	0	0	20	425
Enter	10	0	211	204	425
Exit	0	32	207	186	425

One-Way (south Willard to
Summit Ridge)
2007

	EB	WB	NB	SB	
LT		-31			
TH		-16		10	
RT		-6			-42
Enter	0	-53	0	10	-42
Exit	0	-16	-6	-20	-42

	EB	WB	NB	SB	
LT					
TH		-44			
RT		2		-9	-52
Enter	0	-43	0	-9	-52
Exit	0	-53	2	0	-52

	EB	WB	NB	SB	
LT			-2		
TH		-20	2		
RT				-20	-40
Enter	0	-20	0	-20	-40
Exit	0	-42	2	0	-40

	EB	WB	NB	SB	
LT			-14		
TH			14	37	
RT				-27	10
Enter	0	0	0	10	10
Exit	0	-40	14	37	10

One-Way Traffic Volumes
2007

	EB	WB	NB	SB	
LT	5	0	5	14	
TH	15	0	342	184	
RT	0	0	64	5	633
Enter	20	0	411	202	633
Exit	92	10	347	184	633

	EB	WB	NB	SB	
LT	0	0	0	4	
TH	92	0	0	0	
RT	0	2	0	0	98
Enter	92	2	0	4	98
Exit	96	0	2	0	98

	EB	WB	NB	SB	
LT	17	6	0	5	
TH	71	1	17	9	
RT	7	25	6	1	166
Enter	96	32	23	15	166
Exit	82	2	59	22	166

	EB	WB	NB	SB	
LT	58	0	5	0	
TH	0	0	197	208	
RT	25	0	0	7	499
Enter	82	0	202	215	499
Exit	0	11	255	233	499

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Raw Count Data

	EB	WB	NB	SB	
South Willard - Cliff Street	LT	2	41	1	34
Burlington, VT	TH	10	21	287	244
9/12/2007	RT	3	10	41	8
2nd Wednesday	Enter	15	72	329	286
RSG Count	Exit	85	30	299	288
	% Trucks	0.0%	0.0%	0.6%	0.0%
	Peds	41	0	2	0
	PHF				
	Peak Hour	4:45 PM - 5:45 PM	Peak	0.95	

	EB	WB	NB	SB	
Cliff Street - Summit Ridge	LT				
09/12/07	TH				
2nd Wednesday	RT				0
	Enter	0	0	0	0
	Exit	0	0	0	0
	% Trucks				
	Peds				PHF
	Peak Hour				

	EB	WB	NB	SB	
Cliff Street - Summit/Overlake	LT	9	5	2	20
Burlington, VT	TH	1	0	3	10
9/12/2007	RT	2	5	6	20
2nd Wednesday	Enter	12	10	11	50
	Exit	27	22	17	17
	% Trucks	0.0%	0.0%	0.0%	0.0%
	Peds	4	9	5	9
	PHF				
	Peak Hour	5:00 PM - 6:00 PM	Peak	0.72	

	EB	WB	NB	SB	
South Prospect - Cliff Street	LT	38	0	15	0
Burlington, VT	TH	0	0	106	183
9/12/2007	RT	47	1	1	34
2nd Wednesday	Enter	85	1	122	217
RSG Count	Exit	1	49	145	230
	% Trucks	0.0%	0.0%	0.0%	0.0%
	Peds	19	31	8	4
	PHF				
	Peak Hour	4:45 PM - 5:45 PM	Peak	0.87	

DHV & Annual Adjustments to
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TM Count Year	2nd Wednesday
DHV (Equation)	n/a
DHV (K-Factor)	#VALUE!
Corr. Count	
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

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TM Count Year	2007
DHV (Equation)	n/a
DHV (K-Factor)	720
Corr. Count	134
DHV Adj.	1.23
Annual Adj.	1.00
Total Adj.	1.23

Adjusted Raw Counts
2007

	EB	WB	NB	SB	
LT	2	50	1	42	
TH	12	26	353	300	
RT	4	12	50	10	864
Enter	18	89	405	352	864
Exit	105	37	368	354	864

	EB	WB	NB	SB	
LT	0	0	0	0	
TH	0	0	0	0	
RT	0	0	0	0	0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	11	6	2	25	
TH	1	0	4	12	
RT	2	6	7	25	102
Enter	15	12	14	62	102
Exit	33	27	21	21	102

	EB	WB	NB	SB	
LT	47	0	18	0	
TH	0	0	130	225	
RT	58	0	1	42	522
Enter	105	0	150	267	522
Exit	1	60	177	283	522

Balancing
2007

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	19				
TH	86	75			
RT				14	194
Enter	105	75	0	14	194
Exit	86	89	19	0	194

	EB	WB	NB	SB	
LT					
TH	71	48			
RT					119
Enter	71	48	0	0	119
Exit	71	48	0	0	119

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

Balanced Adjusted Raw
Counts
2007

	EB	WB	NB	SB	
LT	2	50	1	42	
TH	12	26	353	300	
RT	4	12	50	10	864
Enter	18	89	405	352	864
Exit	105	37	368	354	864

	EB	WB	NB	SB	
LT	19	0	0	0	
TH	86	75	0	0	
RT	0	0	0	14	194
Enter	105	75	0	14	194
Exit	86	89	19	0	194

	EB	WB	NB	SB	
LT	11	6	2	25	
TH	73	48	4	12	
RT	2	6	7	25	222
Enter	86	60	14	62	222
Exit	105	75	21	21	222

	EB	WB	NB	SB	
LT	47	0	18	0	
TH	0	0	130	225	
RT	58	0	1	42	522
Enter	105	0	150	267	522
Exit	1	60	177	283	522

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Build
2007

South Willard - Cliff Street
 Burlington, VT
 9/12/2007
 2nd Wednesday
 RSG Count

	EB	WB	NB	SB	
LT	2	50	1	42	
TH	12	26	353	300	
RT	4	12	50	10	864
Enter	18	89	405	352	864
Exit	105	37	368	354	864

Cliff Street - Summit Ridge
 09/12/07
 2nd Wednesday

	EB	WB	NB	SB	
LT	19	0	0	0	
TH	86	75	0	0	
RT	0	0	0	14	194
Enter	105	75	0	14	194
Exit	86	89	19	0	194

Cliff Street - Summit/Overlake
 Burlington, VT
 9/12/2007
 2nd Wednesday

	EB	WB	NB	SB	
LT	11	6	2	25	
TH	73	48	4	12	
RT	2	6	7	25	222
Enter	86	60	14	62	222
Exit	105	75	21	21	222

South Prospect - Cliff Street
 Burlington, VT
 9/12/2007
 2nd Wednesday
 RSG Count

	EB	WB	NB	SB	
LT	47	0	18	0	
TH	0	0	130	225	
RT	58	0	1	42	522
Enter	105	0	150	267	522
Exit	1	60	177	283	522

Closure of Street (South
Willard to Summit Ridge)
2007

Traffic Changes

	EB	WB	NB	SB	
LT	12	-50		-42	
TH	-12	-26	38		
RT		-12	-50		-143
Enter	0	-89	-13	-42	-143
Exit	-105	-26	38	-50	-143

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	-11			-23	
TH	-69	-46		1	
RT	-2			-23	-172
Enter	-83	-46	0	-44	-172
Exit	-92	-68	-11	-1	-172

	EB	WB	NB	SB	
LT	-41		-14		
TH			13	38	
RT	-51			-32	-87
Enter	-92	0	-1	6	-87
Exit	0	-46	-28	-13	-87
	-92				
	-46				

Closure - Traffic Volumes
2007

Traffic Changes

	EB	WB	NB	SB	
LT	15	0	1	0	
TH	0	0	391	300	
RT	4	0	0	10	721
Enter	18	0	392	310	721
Exit	0	11	406	304	721

	EB	WB	NB	SB	
LT					
TH					
RT					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0

	EB	WB	NB	SB	
LT	0	6	2	2	
TH	4	2	4	14	
RT	0	6	7	2	50
Enter	4	15	14	18	50
Exit	13	7	10	20	50

	EB	WB	NB	SB	
LT	6	0	5	0	
TH	0	0	143	263	
RT	7	0	1	10	435
Enter	13	0	149	273	435
Exit	1	15	149	270	435

One-Way (south Willard to
Summit Ridge)
2007

Traffic Changes

	EB	WB	NB	SB	
LT	-50				
TH	-26			12	
RT	-12				-76
Enter	0	-89	0	12	-76
Exit	0	-26	-12	-38	-76

	EB	WB	NB	SB	
LT					
TH	-75				
RT	4			-14	-85
Enter	0	-71	0	-14	-85
Exit	0	-89	4	0	-85

	EB	WB	NB	SB	
LT			-2		
TH	-46	2			
RT				-23	-69
Enter	0	-46	0	-23	-69
Exit	0	-71	2	0	-69

	EB	WB	NB	SB	
LT			-14		
TH			14	46	
RT				-33	12
Enter	0	0	0	12	12
Exit	0	-47	14	46	12

One-Way Traffic Volumes
2007

Traffic Changes

	EB	WB	NB	SB	
LT	2	0	1	42	
TH	12	0	353	313	
RT	4	0	50	10	788
Enter	18	0	405	364	788
Exit	105	11	356	316	788

	EB	WB	NB	SB	
LT	19	0	0	0	
TH	86	0	0	0	
RT	0	4	0	0	110
Enter	105	4	0	0	110
Exit	86	0	23	0	110

	EB	WB	NB	SB	
LT	11	6	0	25	
TH	73	2	6	12	
RT	2	6	7	1	153
Enter	86	15	14	38	153
Exit	105	4	23	21	153

	EB	WB	NB	SB	
LT	47	0	5	0	
TH	0	0	144	271	
RT	58	0	1	8	534
Enter	105	0	150	279	534
Exit	1	13	191	329	534

Vermont Agency of Transportation Vehicle Crash Data
2000 - 2004

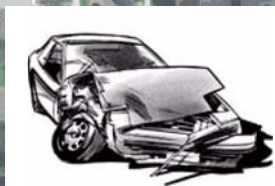
	ID		City	MM	Date	Time	Weather	Description	Type	Injuries	Fatalities	
US 7	U007-0403	0403/13335-02	Burlington	1.67	11/8/2002	17:28	Cloudy	No improper driving	Single Vehicle Crash	1	0	CLIFF ST at N. WILLARD ST
US 7	U007-0403	0403/5502-03	Burlington	1.67	4/3/2003	15:09	Snow	Other improper action	Single Vehicle Crash	0	0	CLIFF ST at N. WILLARD ST
US 7	U007-0403	0403/18563-03	Burlington	1.67	7/28/2003	23:59	Not Reported		Same Direction Sideswipe	0	0	CLIFF ST at N. WILLARD ST
US 7	U007-0403	0403/17727-04	Burlington	1.67	12/29/2004	11:45	Clear	No improper driving, Failed to yield right of way	No Turns, Thru moves only, Broadside ^<	0	0	CLIFF ST at N. WILLARD ST
	0403/9087		Burlington	0	5/31/2000	12:00	Clear	Failed to yield right of way		0	0	S. PROSPECT ST. at CLIFF ST.
	0403/115315-02		Burlington	0	7/20/2002	18:15	Unknown			0	0	CLIFF ST at PROSPECT ST
	0403/941308-02		Burlington	0	9/4/2002	17:30	Clear		Same Direction Sideswipe	0	0	S.PROSPECT ST at CLIFF ST
	0403/13789-02		Burlington	0	9/20/2002	17:35	Clear		Rear End	0	0	S. PROSPECT ST at CLIFF ST
	0403/9915-02		Burlington	0	10/21/2002	11:50	Cloudy	Failed to yield right of way		0	0	CLIFF ST at S PROSPECT PKWY
	0403/13430-02		Burlington	0	12/13/2002	12:00	Clear	No improper driving	Right Turn and Thru, Angle Broadside -->^--	0	0	S. PROSPECT ST at CUFF ST
	0403/19120		Burlington	0	12/27/2002	9:06	Unknown	No improper driving	No Turns, Thru moves only, Broadside ^<	0	0	CLIFF ST at N. WILLARD ST
	0403/2433-03		Burlington	0	1/11/2003	10:41	Cloudy	Inattention	No Turns, Thru moves only, Broadside ^<	0	0	144 CLIFF ST at SUMMIT ST
	0403/2914-03		Burlington	0	1/23/2003	9:33	Cloudy	Unknown	No Turns, Thru moves only, Broadside ^<	0	0	56 CLIFF ST at WILLARD
	0403/3094-03		Burlington	0	1/27/2003	15:48	Clear	Visibility obstructed, Made an improper turn, No improper driving	Head On	0	0	CLIFF ST at SO PROSPECT ST / 369 SO PROSPECT
	0403/2899-03		Burlington	0	3/8/2003	16:44	Unknown	Unknown	Rear End	0	0	222 SUMMIT ST at CLIFF ST
	0403/13402-04		Burlington	0	9/29/2004	14:00	Unknown	Inattention	Rear-to-rear	0	0	369 SOUTH PROSPECT at CLIFF ST
	0403/17897-04		Burlington	0	10/29/2004	1:11	Clear	Unknown	Same Direction Sideswipe	0	0	SOUTH PROSPECT STREET at CLIFF STREET



Vehicle Crashes along Cliff Street from 2000 - 2004

Summit Street

	Crash Type	Description	Date	Time
1	No Turns, Thru moves only, Broadside ^ <	Inattention	1/11/2003	10:41 AM
2	Rear End		3/8/2003	4:44 PM



South Willard

	Crash Type	Description	Date	Time
1	No Turns, Thru moves only, Broadside ^ <	Unknown	1/23/2003	9:33 AM
2	Single Vehicle Crash	No improper driving	11/8/2002	5:28 PM
3	Single Vehicle Crash	Other improper action	4/3/2003	3:09 PM
4	Same Direction Sideswipe		7/28/2003	11:59 PM
5	No Turns, Thru moves only, Broadside ^ <	No improper driving, Failed to yield right of way	12/29/2004	11:45 AM
6	No Turns, Thru moves only, Broadside ^ <	No improper driving	12/27/2002	9:06 AM

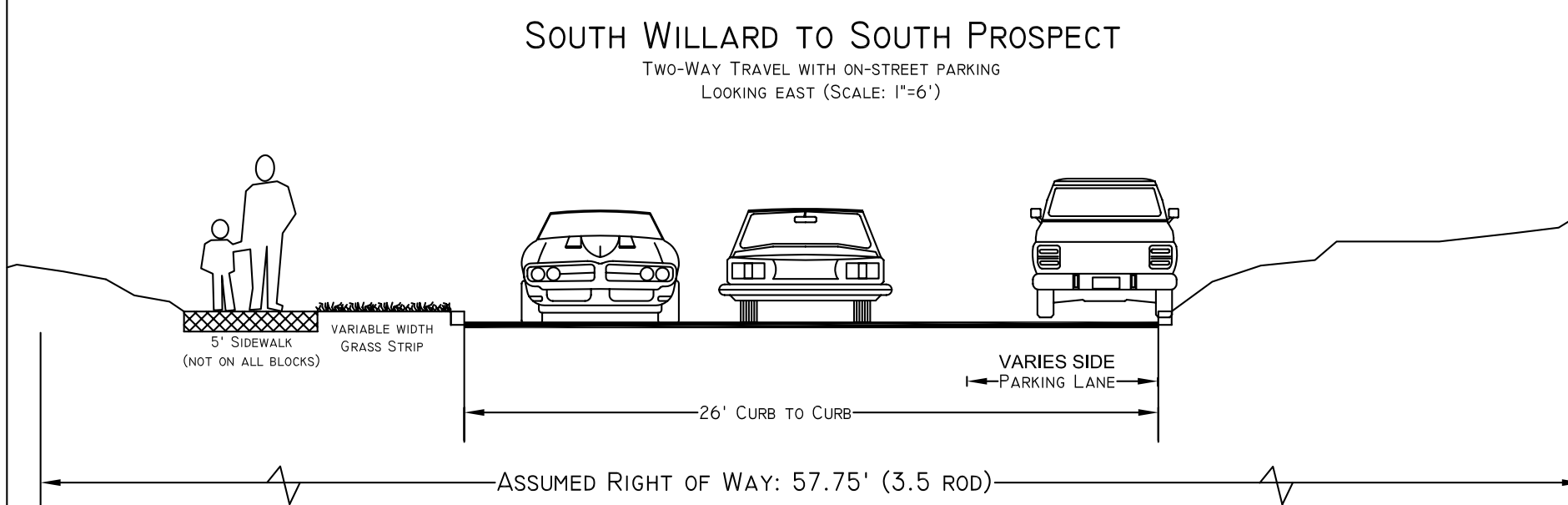
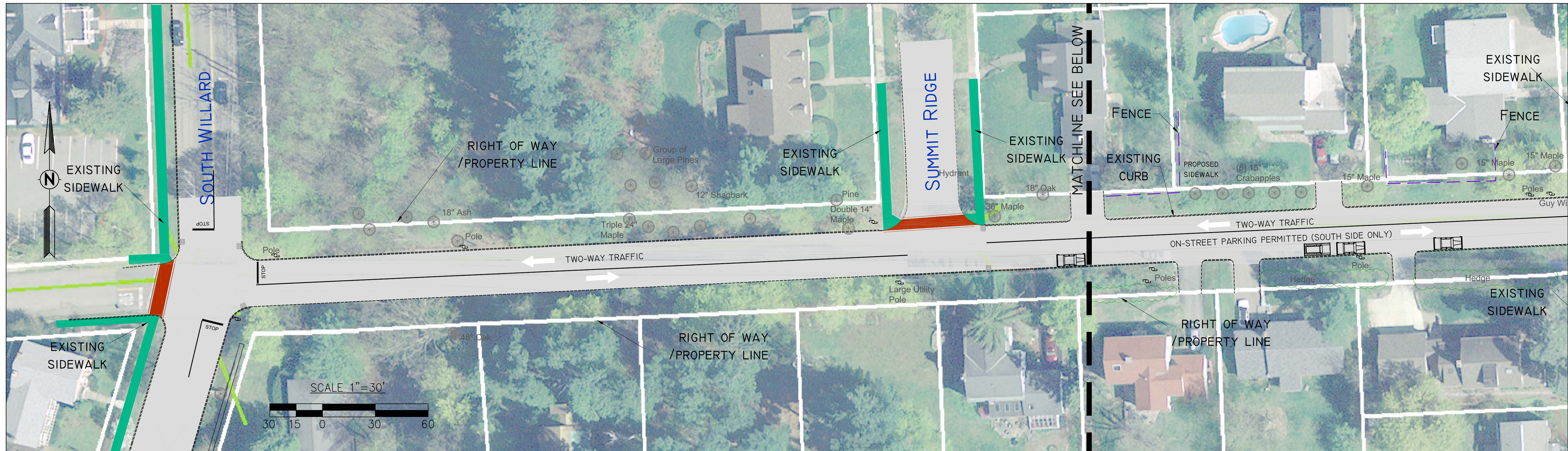
South Prospect Street

	Crash Type	Description	Date	Time
1		Failed to yield right of way	5/31/2000	12:00 PM
2			7/20/2002	6:15 PM
3	Same Direction Sideswipe		9/4/2002	5:30 PM
4	Rear End		9/20/2002	5:35 PM
5		Failed to yield right of way	10/21/2002	11:50 AM
6	Right Turn and Thru, Angle Broadside -- > ^ --	No improper driving	12/13/2002	12:00 PM
7	Head On	Visibility obstructed, Made an improper turn, No improper driving	1/27/2003	3:48 PM
8	Rear-to-rear	Inattention	9/29/2004	2:00 PM
9	Same Direction Sideswipe	Unknown	10/29/2004	1:11 AM

APPENDIX B

DESIGN ALTERNATIVES





NO BUILD ALTERNATIVE



CLIFF STREET MOBILITY STUDY ALTERNATIVE 1



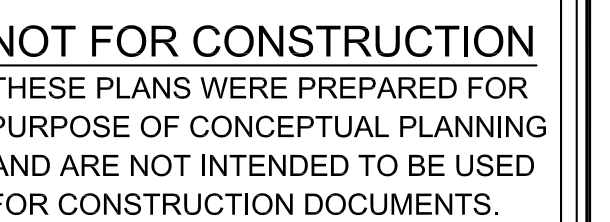
NOT FOR CONSTRUCTION
THESE PLANS WERE PREPARED FOR
PURPOSE OF CONCEPT PLANNING
AND ARE NOT INTENDED TO BE USED
FOR CONSTRUCTION DOCUMENTS.

REVISIONS

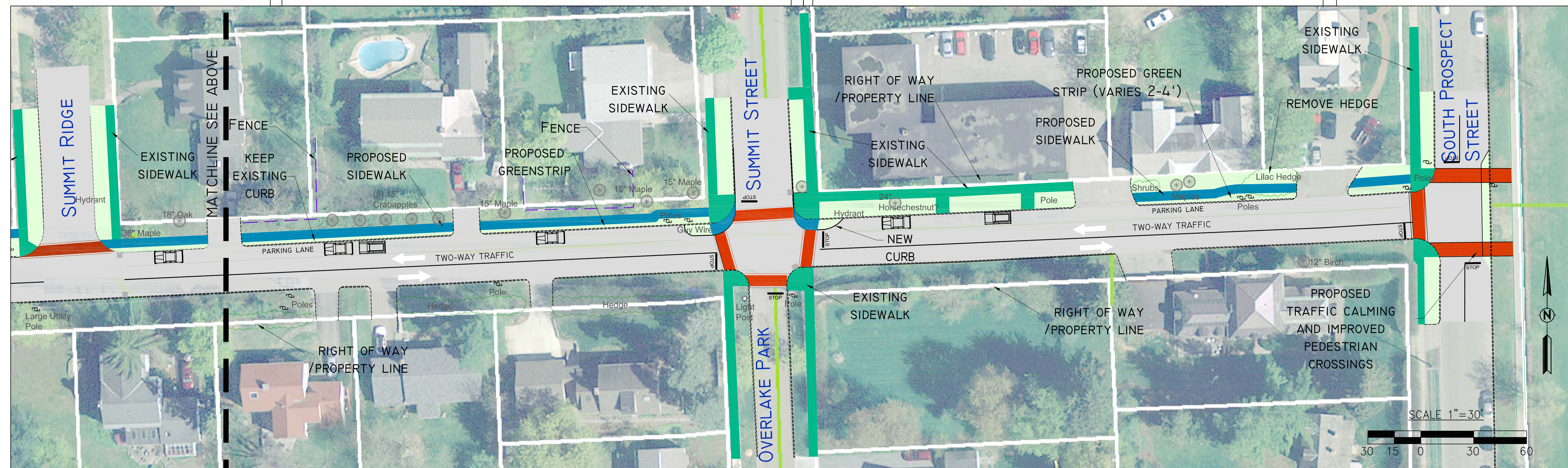
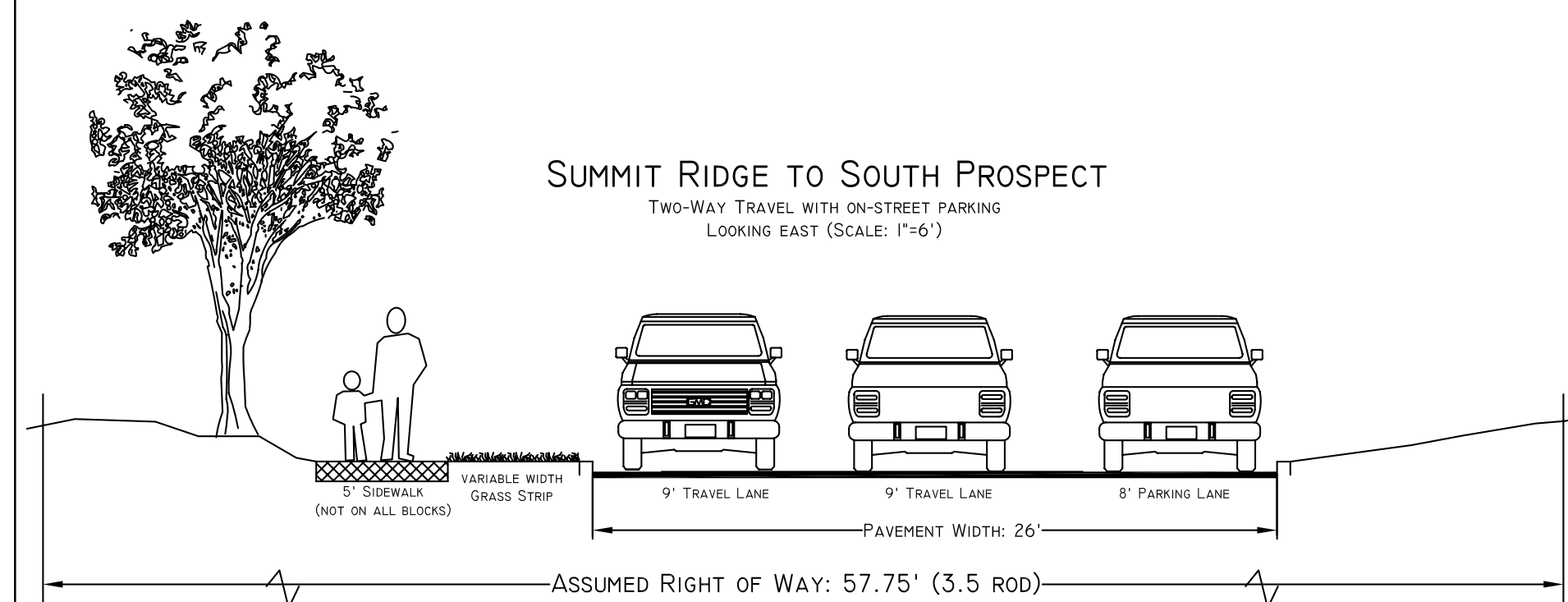
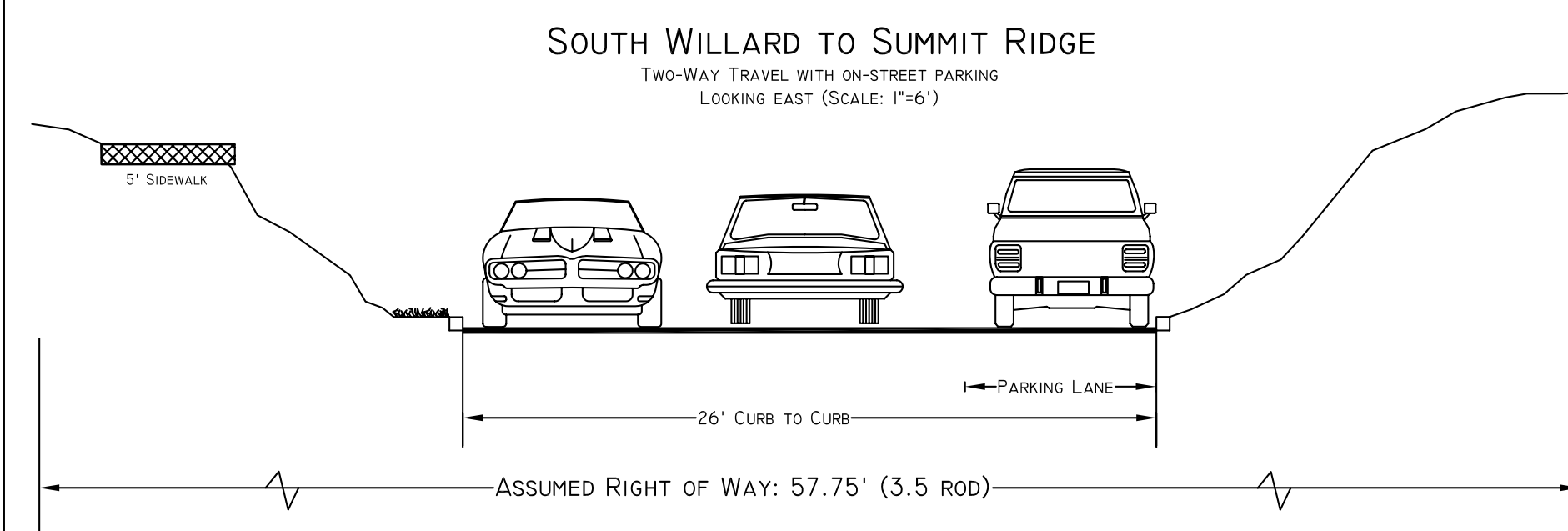
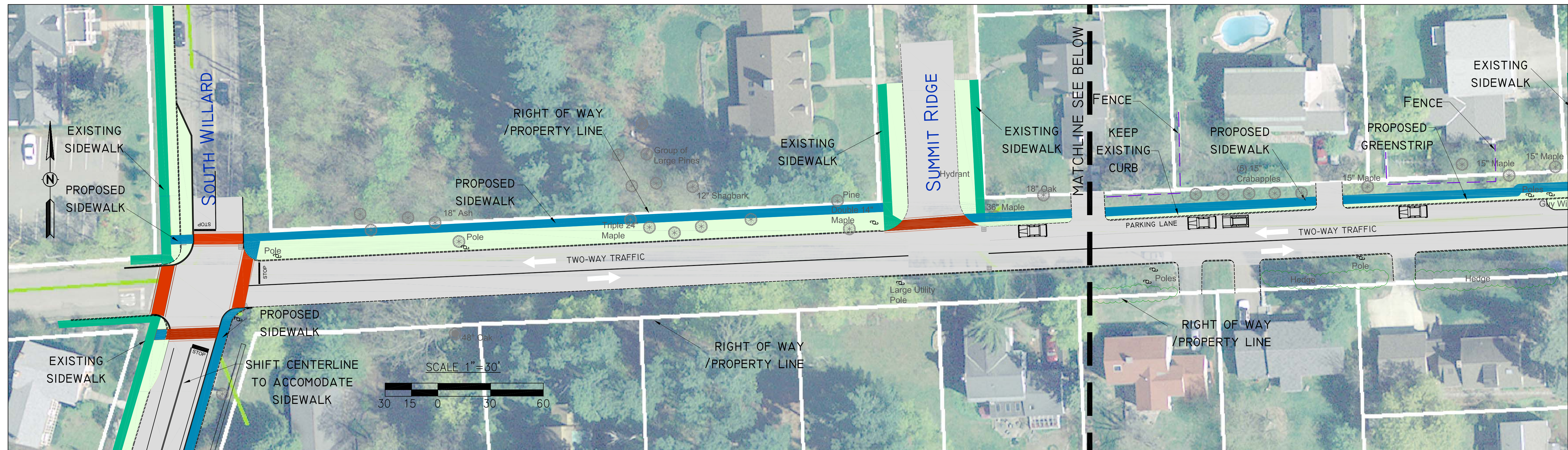
DATE	DESCRIPTION	BY

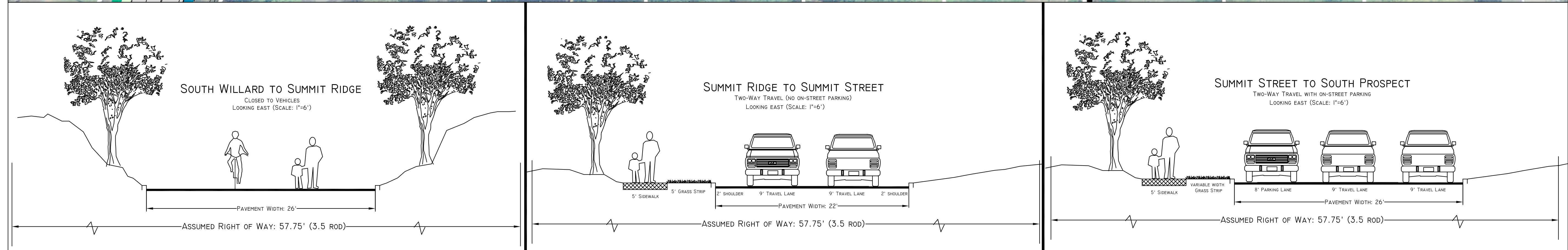
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DRAWN BY:	JLS	1
CHECKED BY:	MS	1
DATE:	11/08/2007	OF 5
PROJ. NO.:	07003	

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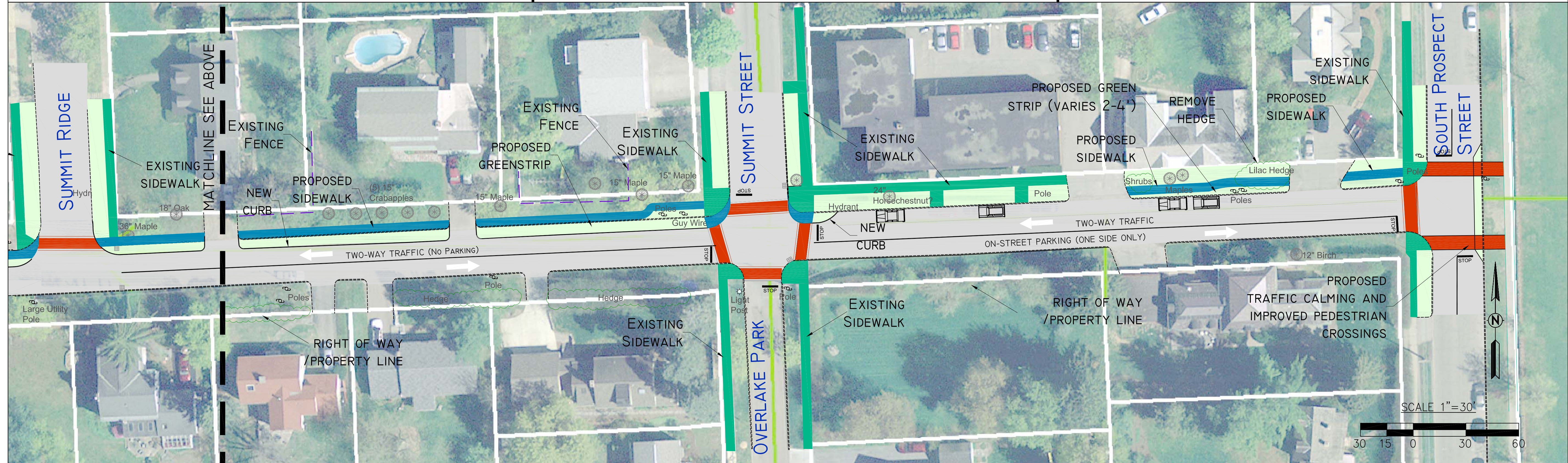
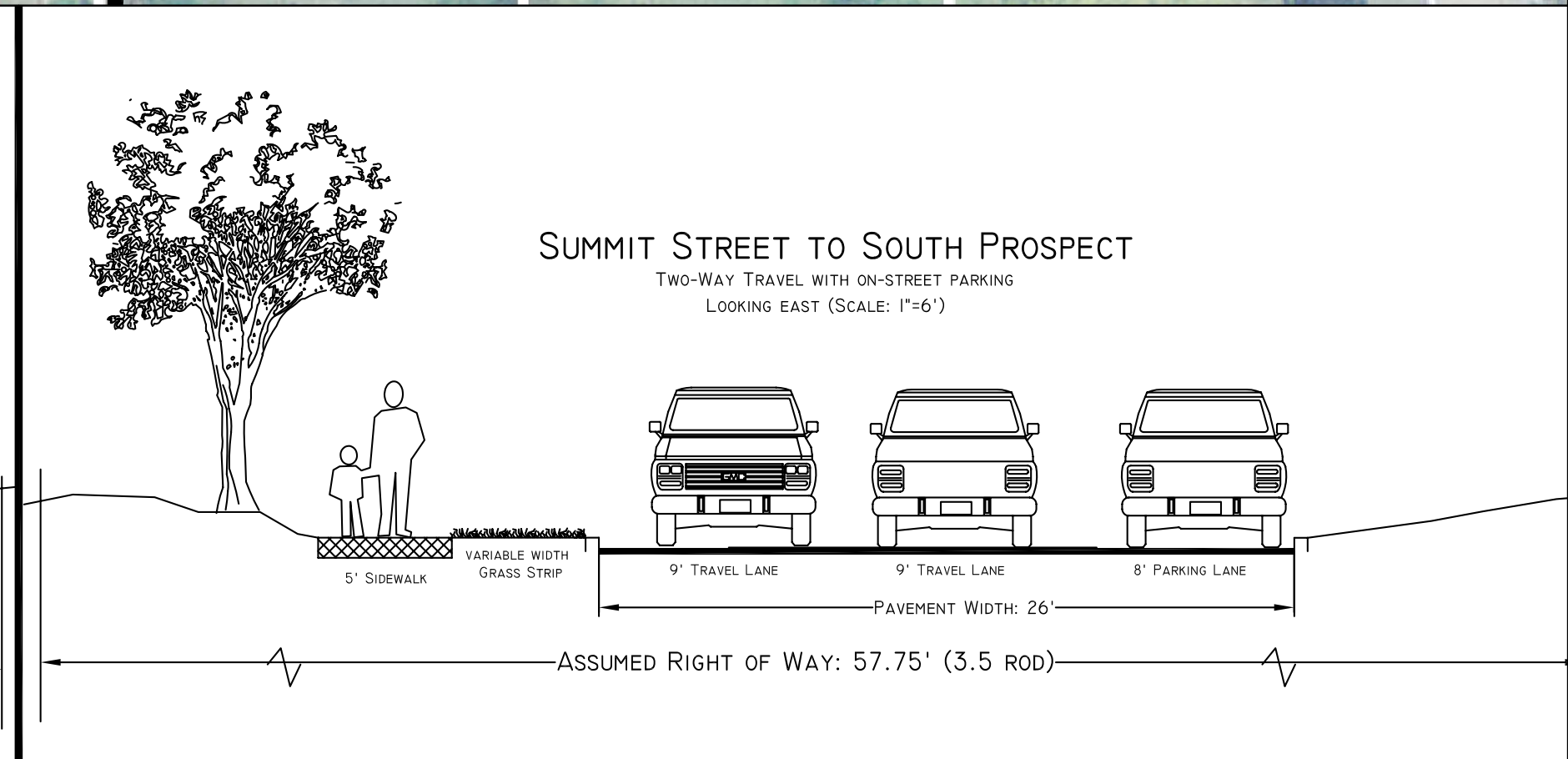
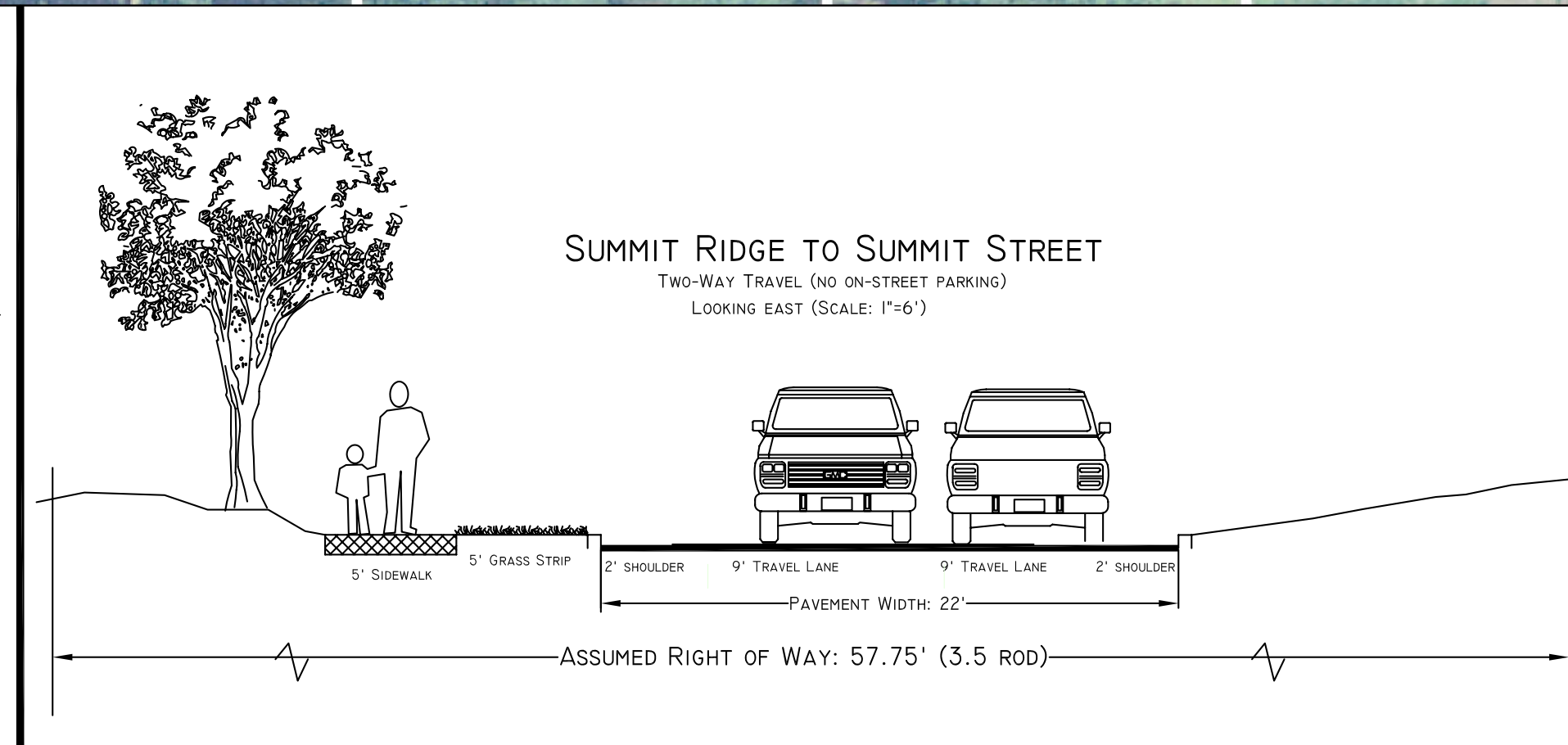
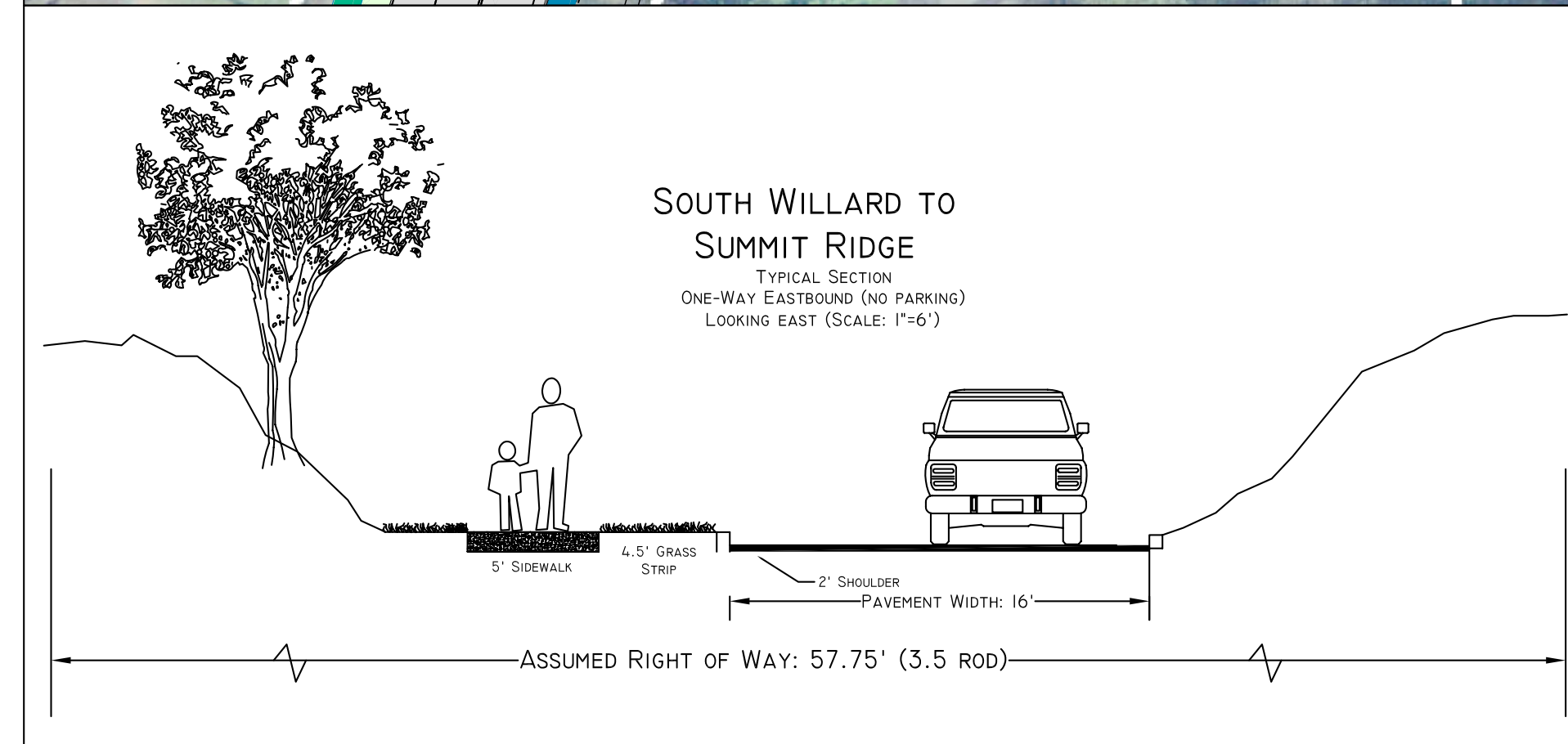
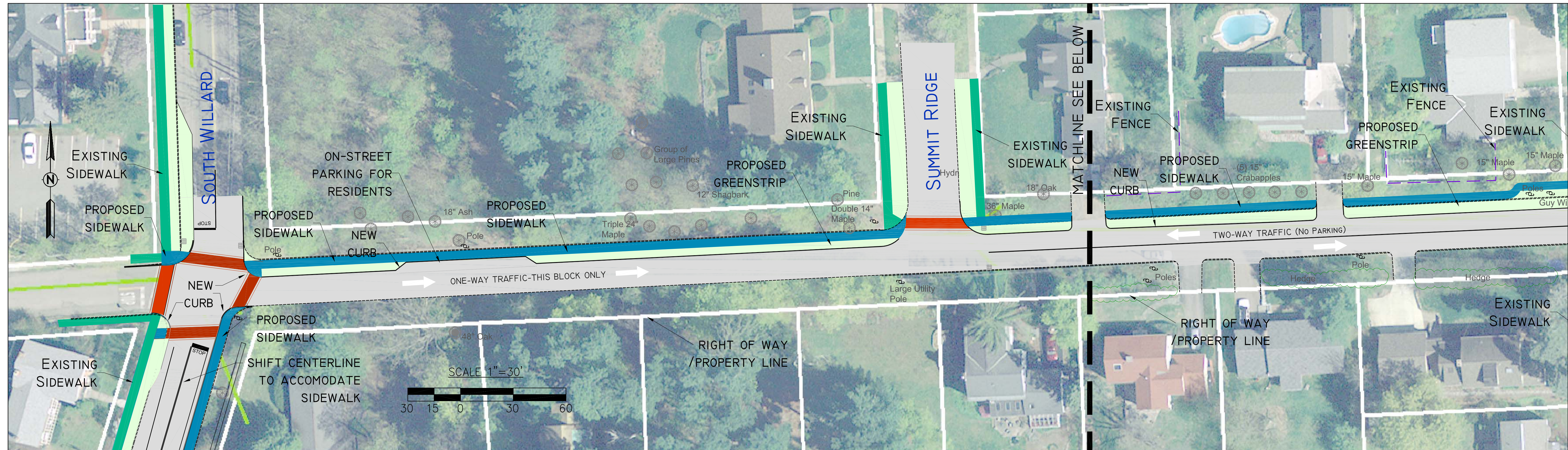
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CHECKED BY:	MS	
DATE:	11/08/2007	
PROJ. NO.:	07003	



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CONCEPT PLANS

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DESIGNED BY:	JLS	
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CHECKED BY:	MS	
DATE:	11/08/2007	
PROJ. NO.:	07003	



CLIFF STREET MOBILITY STUDY ALTERNATIVE 4



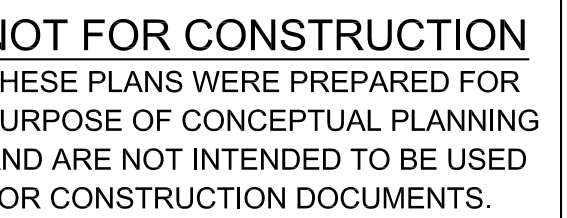
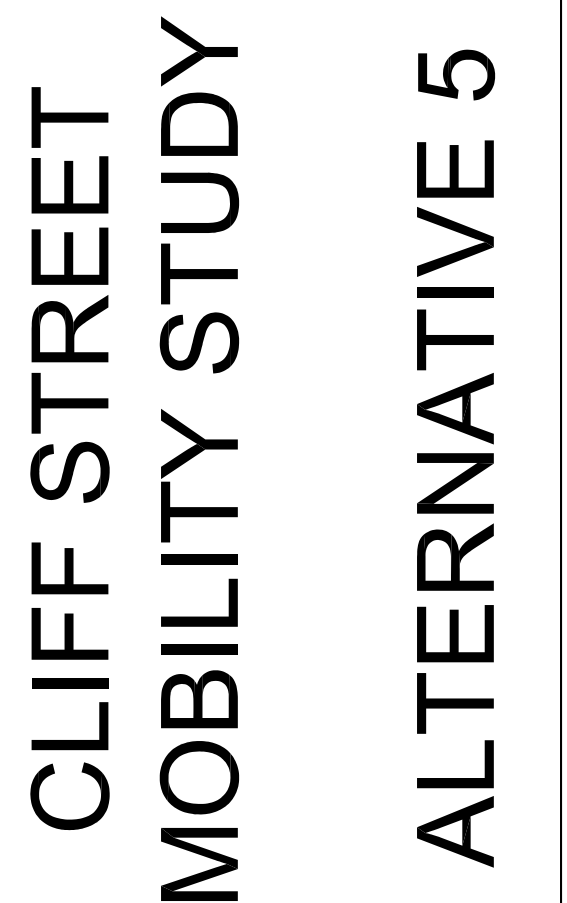
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REVISIONS

DATE	DESCRIPTION	BY

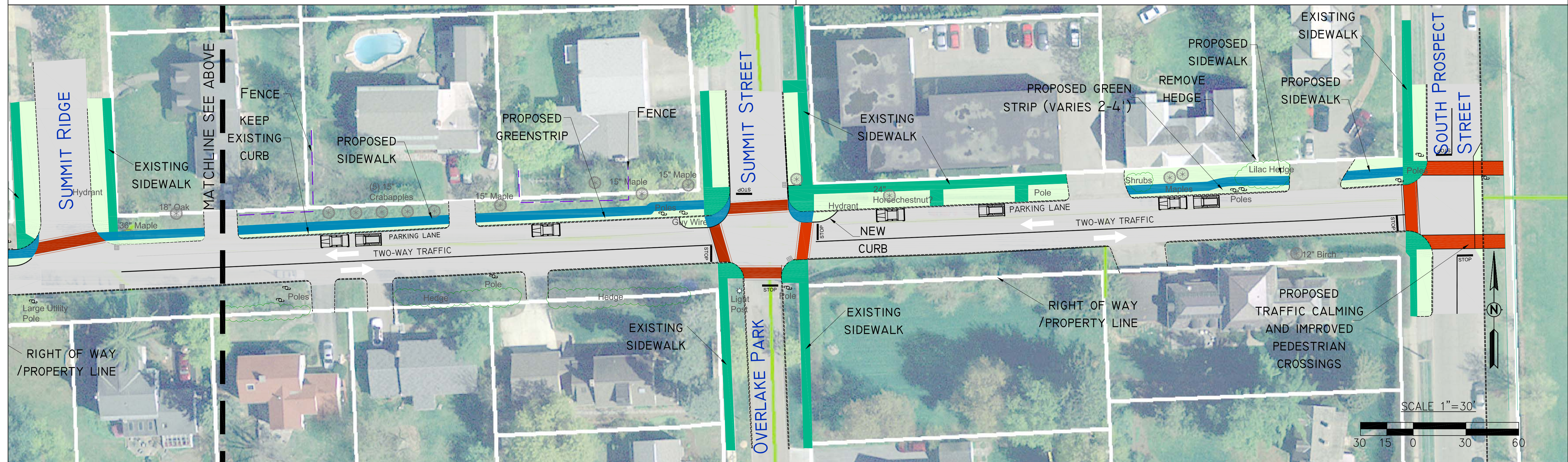
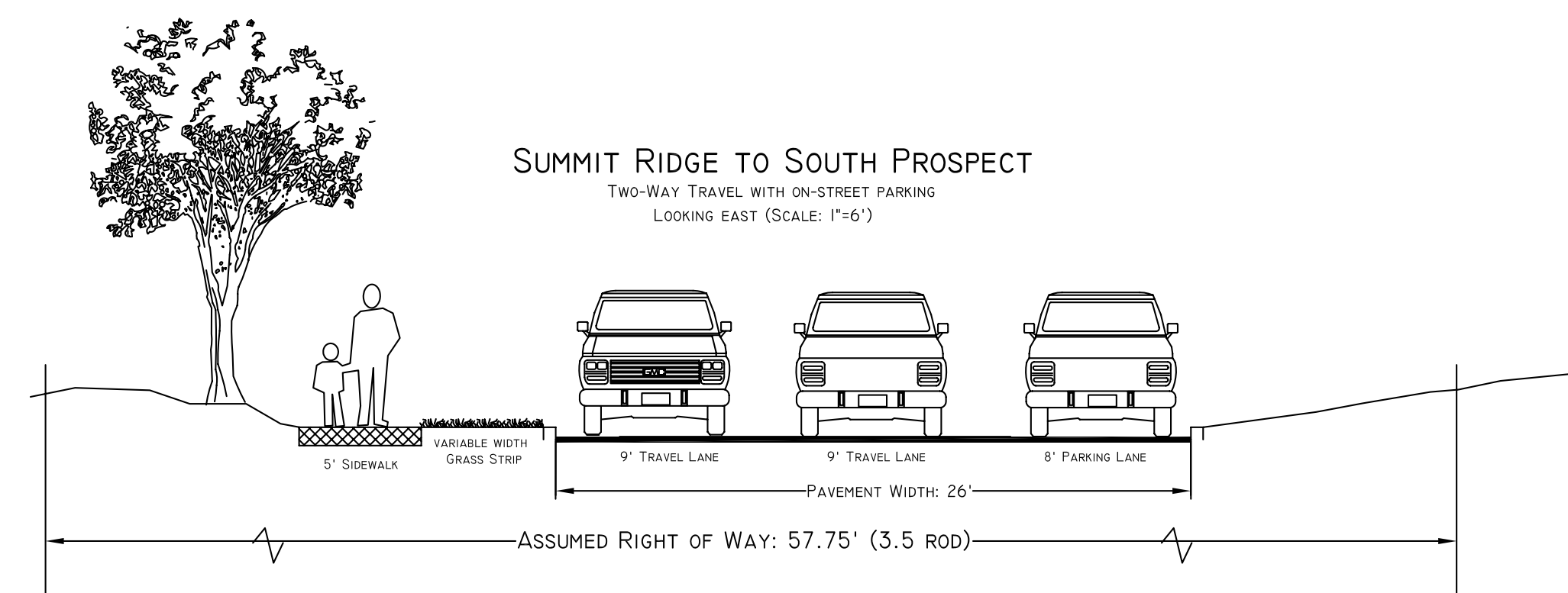
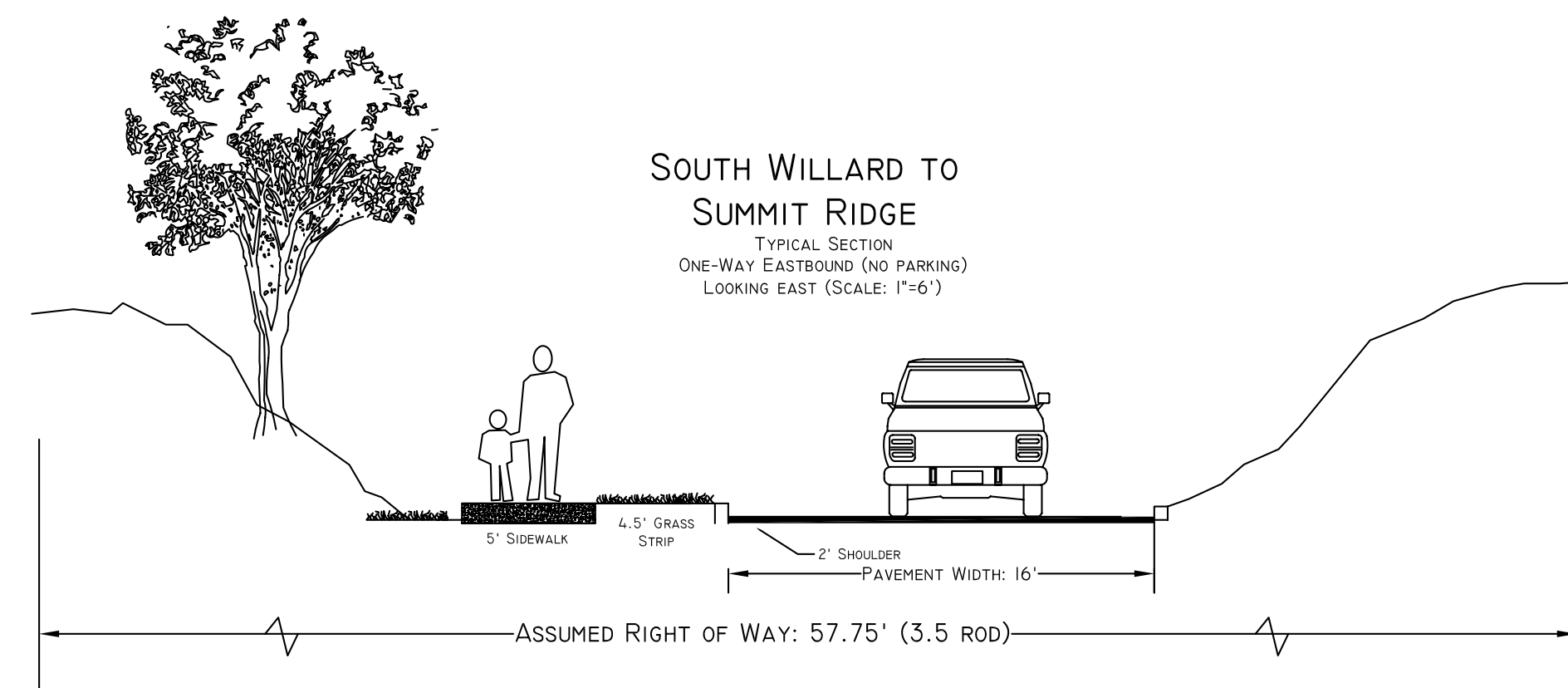
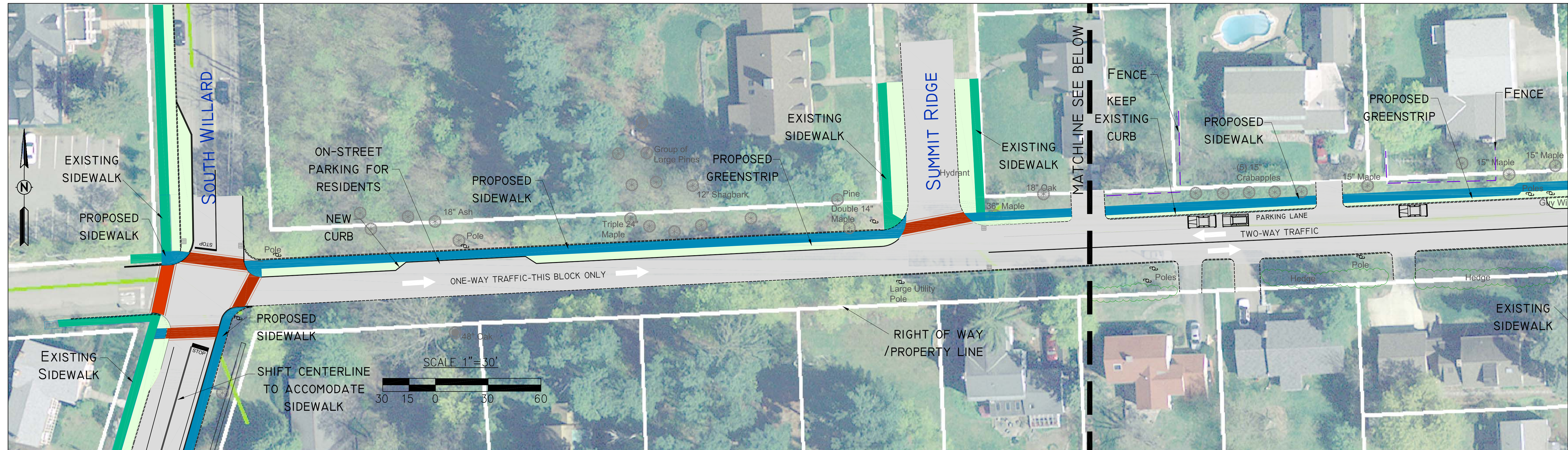
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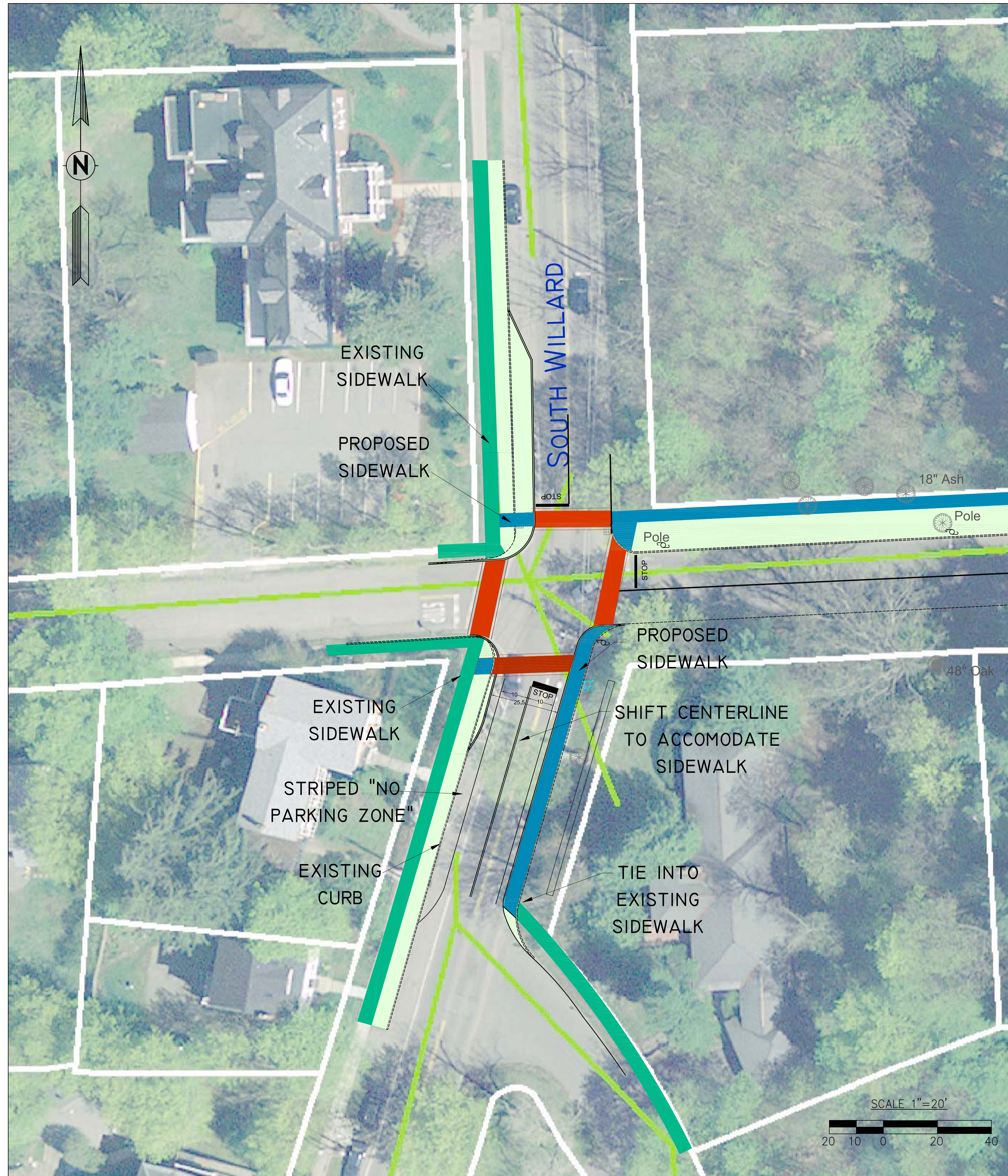
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PROJ. NO.:	07003	

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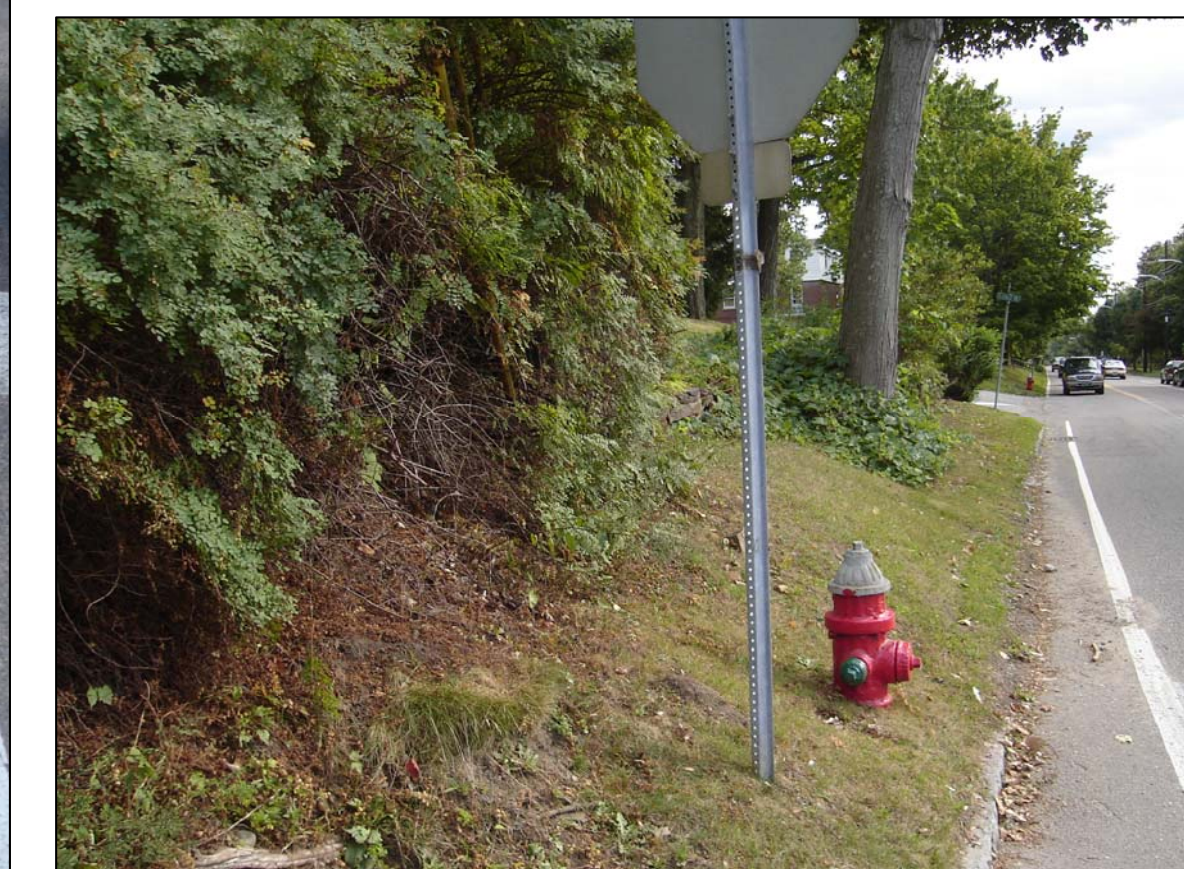
CONCEPT PLANS

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DESIGNED BY:	JLS	
DRAWN BY:	JLS	
CHECKED BY:	MS	
DATE:	11/08/2007	
PROJ. NO.:	07003	





Sidewalk on South Willard



CLIFF STREET MOBILITY STUDY S. Willard - Cliff Street



NOT FOR CONSTRUCTION
THESE PLANS WERE PREPARED FOR
PURPOSE OF CONCEPT PLANNING
AND ARE NOT INTENDED TO BE USED
FOR CONSTRUCTION DOCUMENTS.

REVISIONS		
DATE	DESCRIPTION	BY

CONCEPT PLANS		
SCALE:	1"=20'	SHEET
DESIGNED BY:	JLS	1 OF 1
DRAWN BY:	JLS	
CHECKED BY:	MS	
DATE:	11/08/2007	
PROJ. NO.:	07003	

APPENDIX C

MEETING PRESENTATIONS



PUBLIC MEETING NOTICE

Cliff Street Mobility Study

What:

You are invited to a public meeting to discuss potential improvements to Cliff Street, between South Willard Street and South Prospect Street. The City of Burlington is working with consultants to develop a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility.

Your participation can help to define what types of improvements would be investigated and guide the City and the consultants as they work to develop possible improvement alternatives.

When:

Thursday, March 22, 2007
6:30 p.m.

Where:

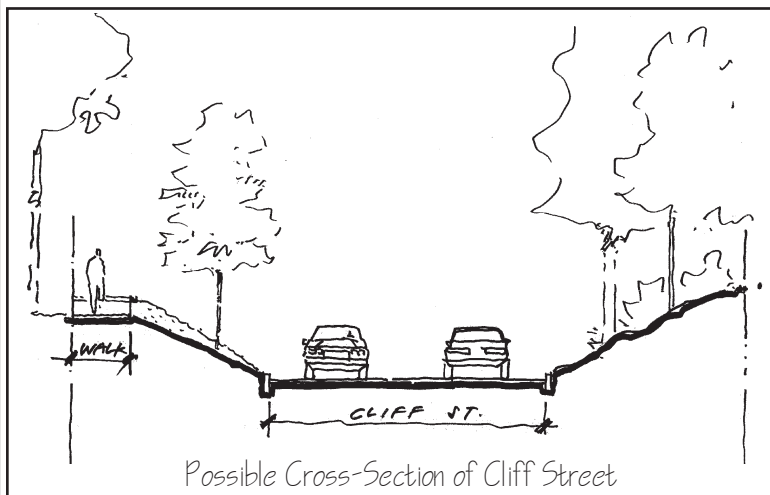
Champlain College
Miller Information Commons
(83 Summit Street)
East/West Conference Room
(3rd Floor)



View from Summit Street Looking West



View from Summit Ridge Looking West



Possible Cross-Section of Cliff Street

If you are unable to attend the meeting please contact Nicole Losch at Burlington Department of Public Works to submit questions or comments.

email: nlosch@ci.burlington.vt.us

online: www.dpw.ci.burlington.vt.us



Cliff Street Mobility Study

Local Concerns Meeting: 3/22/07





Today's Agenda

- 1. Introduction, Overview & Background**
- 2. Study Area**
- 3. Definition & Process**
- 4. Goals & Strategies**
- 5. Identified Issues**
- 6. Listening & Brainstorming (2 Groups)**
- 7. Next Steps**



Project Overview & Background

- The Cliff Street area has been a concern of the local neighborhood and the City for the last two decades.
- The issue again was brought up at a Ward 6 NPA Meeting after a petition was signed by 182 people who desired that a sidewalk be installed along upper Cliff Street
- CEDO and Ward 6 arranged a series of three meetings where citizens discussed sidewalks on Cliff Street – it became obvious there needed to be a larger planning effort made to address all identified concerns
- The City applied for a Chittenden County Metropolitan Planning Organization 'Transportation for Livable Communities (TLC)' Grant.
 - Support a community's development and/or redevelopment activities
 - Will be conducted through a collaborative and inclusive planning process
 - Enhance a community's identity and overall quality of life



Purpose, Objectives & Strategies

- The City pursued the TLC grant as a means to facilitate the neighborhood process that has shaped the project to date. The primary purpose of this study is to provide a process for the community to address the mobility concerns of Cliff Street.

- The study area includes the south end of South Street, from the intersection of Willard and South Street to the intersection of the very short segment of South Street and West Road.
- This is the first time that the community has been involved in the process of reviewing the proposals as we progress through this project.
- Ward 1 and Ward 2 are the Steering Committee for this project.
- The City is managing this project and the consultants will be the facilitators and consensus builders with the technical skills to examine potential options that the community would like to have investigated.
- City staff and the consultants are your resources to help you define and develop the potential improvements to Cliff Street.



Study Objective

“Create a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility. The concepts should be constructible and meet all applicable design standards. The plan will enhance the Cliff Street neighborhood and reflect the ‘rural’ characteristics while maintaining its importance as an east-west connection”



Project Process & Definition

PHASE A: Project Definition

- Steering Committee Meeting: *define the goals and objectives*

- Local Concerns Meeting: *define the purpose and need*

Today

- Steering Committee Meeting: *review alternatives*

- Resolution: *approve preliminary designs*

- Alternatives: *prepare alternatives*

Late Summer

- Steering Committee Meeting: *select preferred alternative, one preferred*

- Preferred Alternative Selection: *consultants final report*

- Environmental Impact Resolution: *may or may not be required*

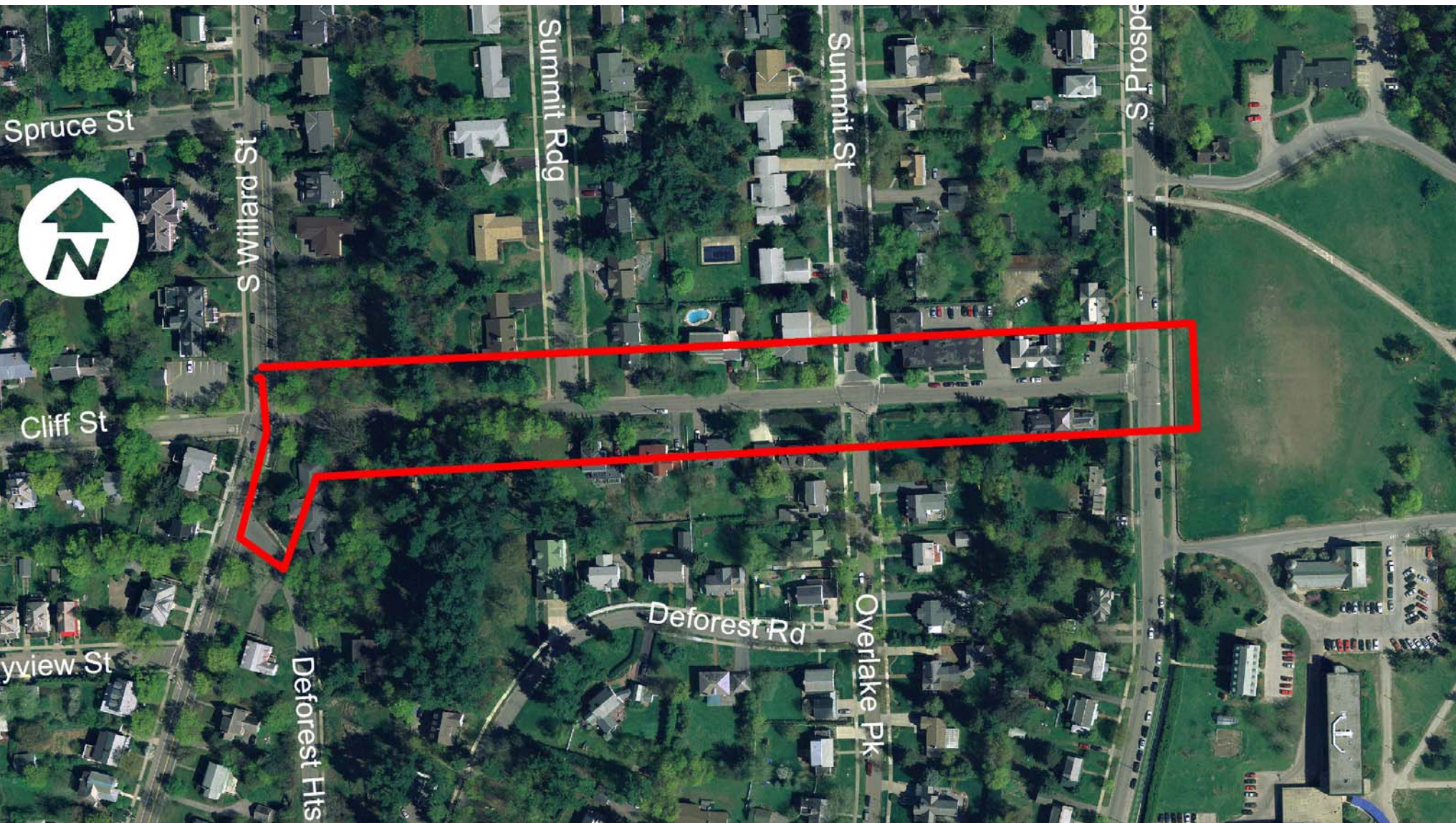
PHASE B: Project Design (Utilities, ROW, Permits, Contract Plans)

PHASE C: Construction

- City staff will identify funding sources, which will be influenced by the details within the proposed alternatives

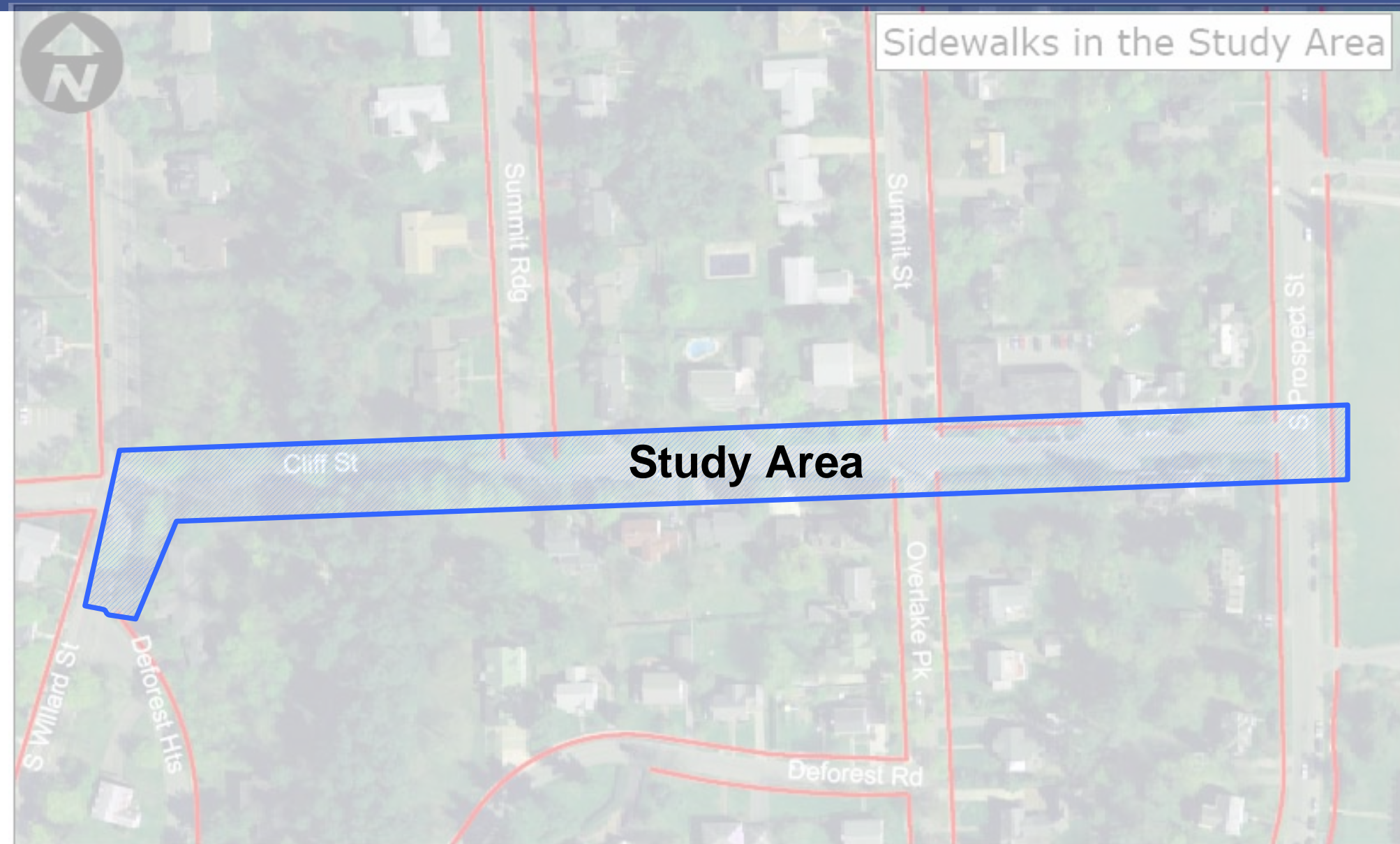


Project Study Area





Sidewalks in the Vicinity





Identified Issues

No Sidewalk

Have to Walk in the Street

Traffic has Increased

Safety Concern

Poor Lighting

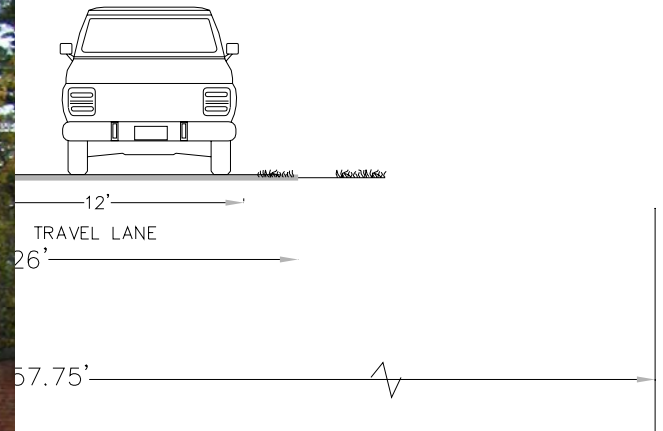
Steep Grades

Drainage Issues

Widening Difficult



Existing Roadway Conditions



Resident Parking Only:

South Willard to Summit Street

- South side of street

Summit Street to South Prospect

- North side of street



Road Grades in Study Area

Sidewalks in the Study Area

Average Grade: 15%
Max Grade: 16%

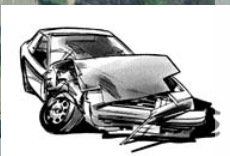
Average Grade: ~6%
Max Grade: 10%

Average Grade: ~5%
Max Grade: 6%

Existing Traffic Conditions: Crashes

South Prospect Street

Crash Type	Description	Date	Time
1	Failed to yield right of way	5/31/2000	12:00 PM
2	Inattention	1/17/20/2002	6:15 PM
3	Same Direction Sideswipe	9/4/2002	5:30 PM
4	Rear End	9/20/2002	5:35 PM
5	Failed to yield right of way	10/21/2002	11:50 AM
6	Right Turn and Thru, Angle Broadside --> ^--	12/13/2002	12:00 PM
7	Head On	1/27/2003	3:48 PM
8	Rear-to-rear	9/29/2004	2:00 PM
9	Same Direction Sideswipe	10/29/2004	1:11 AM

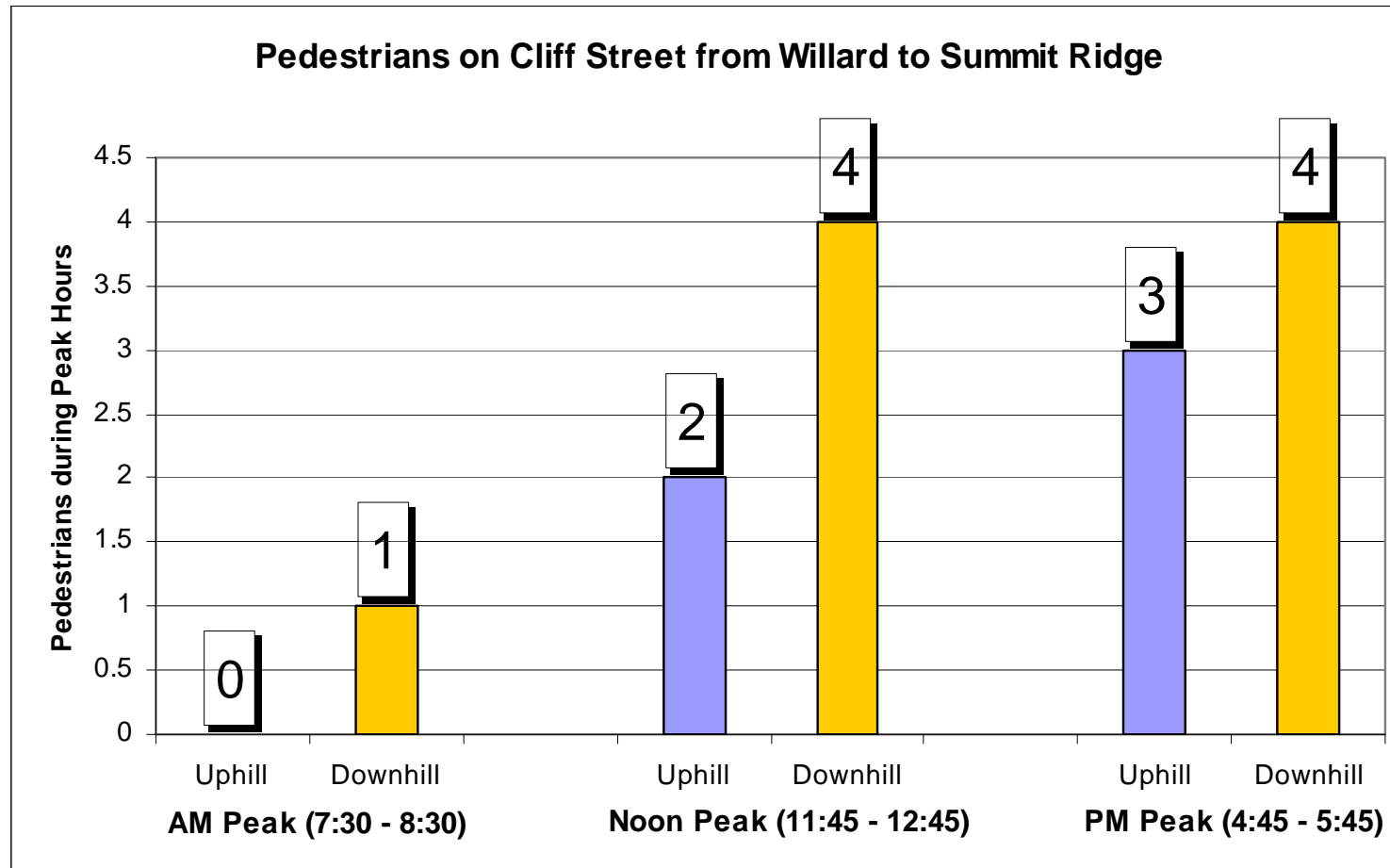


South Willard

Crash Type	Description	Date	Time
1	Unknown	5/33/2002	9:33 AM
2	Single Vehicle Crash	11/8/2002	5:28 PM
3	Single Vehicle Crash	4/3/2003	3:09 PM
4	Same Direction Sideswipe	7/28/2003	11:59 PM
5	No Turns, Thru moves only, Broadside ^<	12/29/2004	11:45 AM
6	No Turns, Thru moves only, Broadside ^<	12/27/2002	9:06 AM



Existing Traffic Conditions: Pedestrians



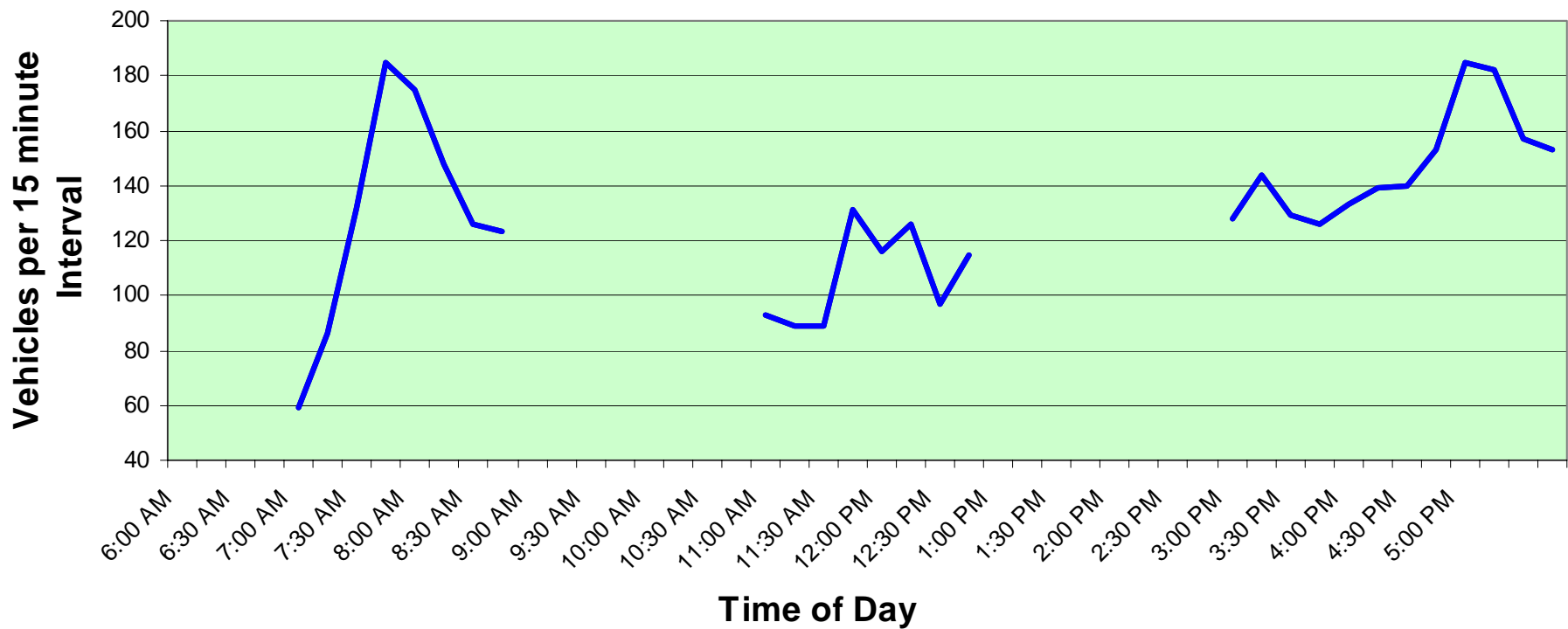
Only a snapshot in time.

Pedestrian demand data is not easily available. This data was taken on January 25th, 2007



Existing Traffic Conditions: Vehicles

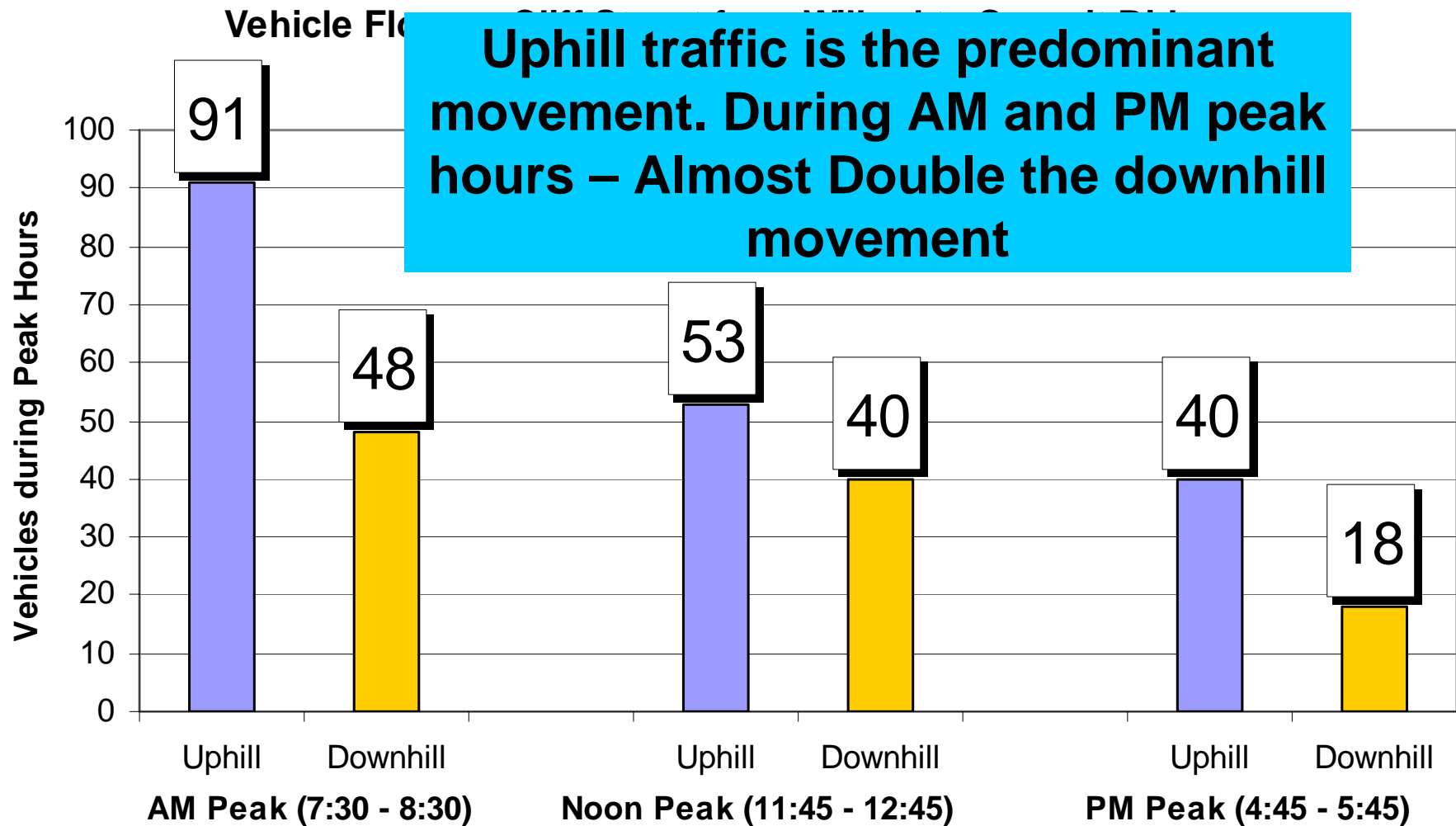
Vehicles at the South Willard Street - Cliff Street Intersection



**Data taken during the AM, mid-day,
and PM peak periods.**



Existing Traffic Conditions: Vehicles

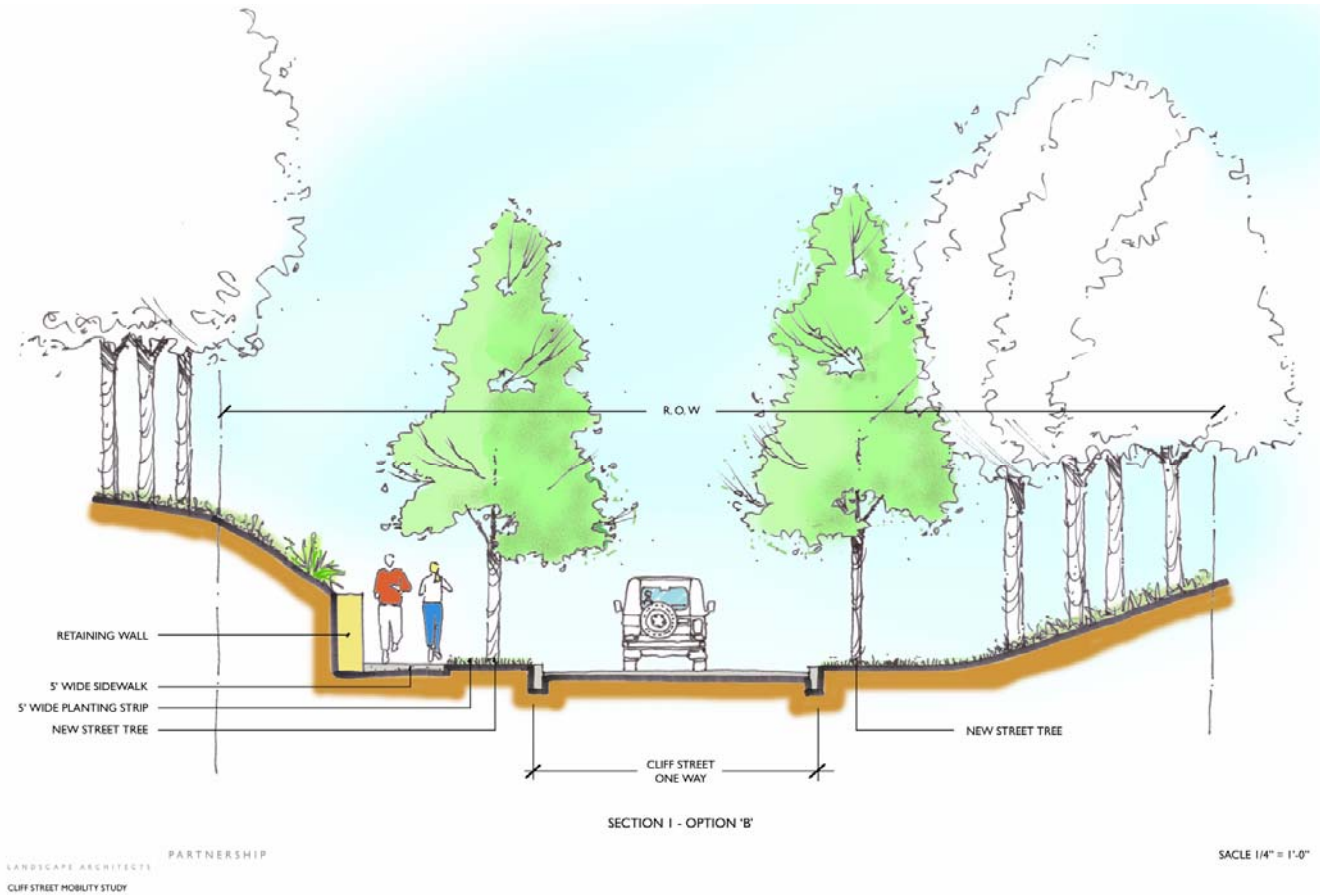




Potential Alternatives: Listening & Brainstorming

The Consultants have begun to evaluate what options exist for the different segments of Cliff Street.

These sketches are meant only to provide some visual context to begin the brainstorming/public input session.





On Your Handouts

What are your top three concerns in the Study Area?

What are your optimal solutions to those concerns?

What is your reaction to the solutions discussed tonight?

What benefits/good outcomes do you hope to see in this area?

Anything else you'd like to add?



Next Steps

- **Develop Alternatives**
- **Evaluation Matrix**
- **Alternatives Presentation Meeting (Late Summer)**
- **Top 2 Alternatives Further Refined**
- **Final Report (September)**



Contacts

Nicole Losch, Bicycle/Pedestrian/Environmental Planner

Burlington Department of Public Works

(802) 865-5833

nlosch@ci.Burlington.vt.us

Jon Slason, Project Manager

Resource Systems Group

(802) 383-0118

jslason@rsginc.com

<http://www.dpw.ci.burlington.vt.us/transportation/projects/CliffStreet.php>



Cliff Street
Study

Cliff Street Mobility Study

Steering Committee: 4/4/07



R | S | G INC.
RESOURCE SYSTEMS GROUP, INC.



Burlington

H. KEITH WAGNER | PARTNERSHIP
LANDSCAPE ARCHITECTS



Today's Agenda

- 1. Review Process and Schedule**
- 2. Public Meeting 1 Recap**
- 3. Street Alternatives**
- 4. Evaluation Matrix**
- 5. Public Meeting 2**
- 6. Next Steps**



Review Process and Schedule

PHASE A: Project Definition

- Steering Committee Meeting: *define the goals and objectives*

- Local Concerns Meeting: *define the purpose and need*

- Steering Committee Meeting: *identify potential alternatives* **Today**

- Resource Identification & Alternative Investigation: *preliminary designs*

- Alternatives Presentation Meeting: *preliminary designs* **Late Summer**

- Steering Committee Meeting: *identify two alternatives, one preferred*

- Preferred Alternative Selection: *consultants final report*

- Environmental Impact Resolution: *may or may not be required*

PHASE B: Project Design (Utilities, ROW, Permits, Contract Plans)

PHASE C: Construction

- City staff will identify funding sources, which will be influenced by the details within the proposed alternatives



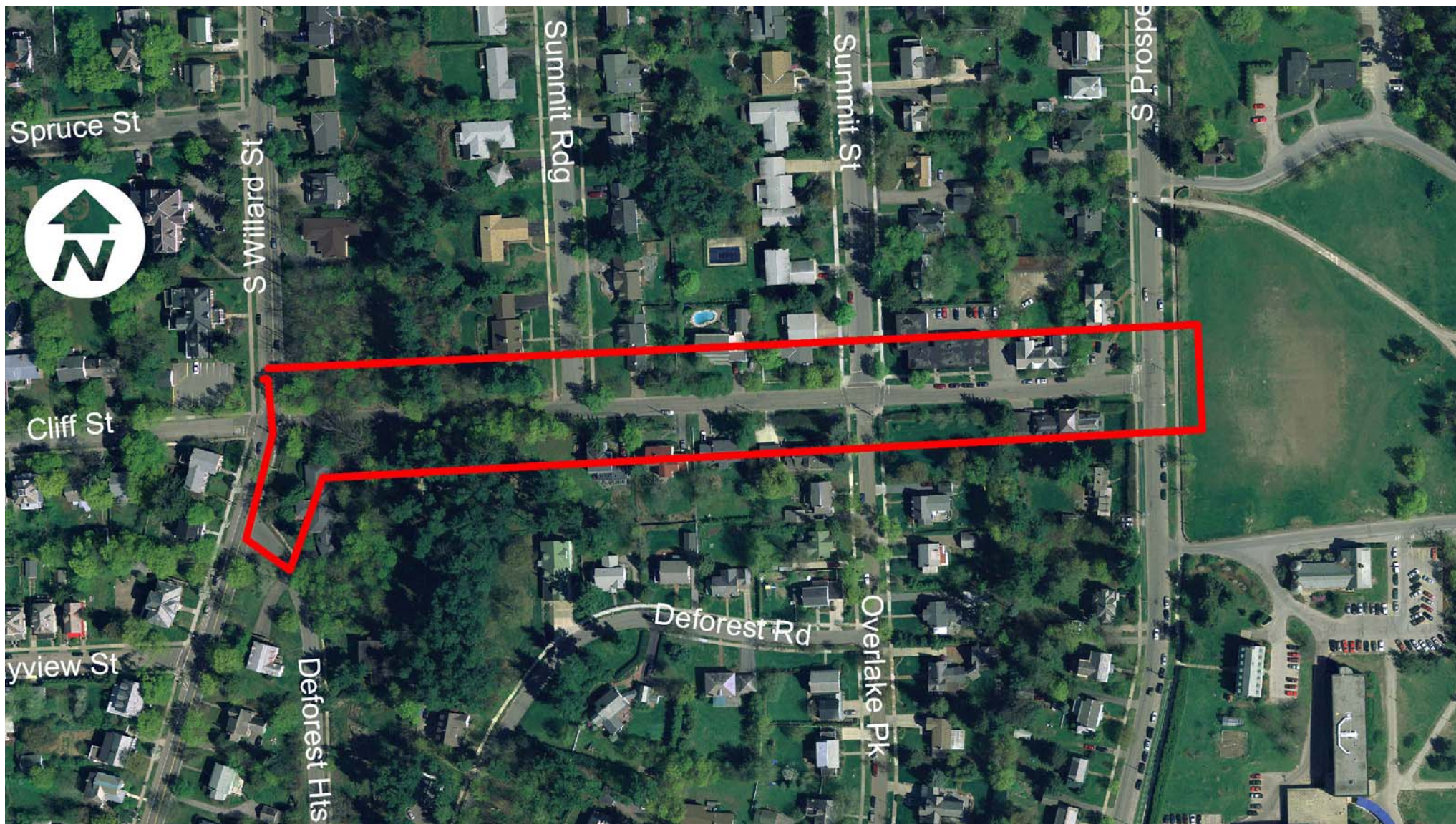
Study Objective

“Create a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility. The concepts should be constructible and meet all applicable design standards. The plan will enhance the Cliff Street neighborhood and reflect the ‘rural’ characteristics while maintaining its importance as an east-west connection”



Cliff Street
Study

Project Study Area





Public Meeting Re-Cap

Prior Identified Issues:

No Sidewalk

Have to Walk in the Street

Traffic has Increased

Safety Concern

Poor Lighting

Steep Grades

Drainage Issues

Widening Difficult

New Identified Issues

- Prioritize Improvements**
- Impacts to adjacent street of re-routed vehicles**
- Emergency access to neighborhood with street closure/one-way**
- What cheap options are available that meets our objectives**
- Keep trees and understand City's arbor plan**
- Place signs for steep hill**
- Restrict Truck Traffic**



Street Alternatives: S. Willard to Summit Ridge

Maintain Existing Curb to Curb

- Place a sidewalk on the north side of the street
- The sidewalk would be between the City ROW and the edge of the curb

One-Way

- One-Way Uphill
- Place a sidewalk on the north side of the street

Closure of the Street

- Close the street to vehicular traffic
- Turned into a public space, provide bike/walkway, potential storm water treatment, stairs, etc.



Street Alternatives: Summit Ridge to S. Prospect

Maintain Existing Curb to Curb

- Place a sidewalk on the north side of the street
- The sidewalk would be between the City ROW and the edge of the curb
- Special attention will be paid to the locations of street trees and power poles.



Next Steps

- **Develop Alternatives**
- **Evaluation Matrix**
- **Alternatives Presentation Meeting (Late Summer)**
- **Top 2 Alternatives Further Refined**
- **Final Report (September)**



Contacts

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Jon Slason, Project Manager

Resource Systems Group

(802) 383-0118

jslason@rsginc.com

<http://www.dpw.ci.burlington.vt.us/transportation/projects/CliffStreet.php>



Cliff Street Mobility Study

Steering Committee: 10/4/07



H. KEITH WAGNER | PARTNERSHIP
LANDSCAPE ARCHITECTS



Study Objective

“Create a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility. The concepts should be constructible and meet all applicable design standards. The plan will enhance the Cliff Street neighborhood and reflect the ‘rural’ characteristics while maintaining its importance as an east-west connection”



Improvement Options

Overarching Design Concepts

Concept 1: Two-Way Travel

- **Maintain existing curb line**
- **Place sidewalk on north side**

Concept 2: One-Way

- **Reduce width of street**
- **Remove Parking**
- **Sidewalk on north side of street**

Concept 3: Partial Closure

- **Cliff Street closed to through traffic in one location**

Design Alternatives will incorporate elements of these Design Concepts

Each Alternative will mix and match these concepts



Today's Meeting

Purpose of Today's Meeting

Narrow down the vast number of alternatives that are possible on this stretch of roadway.

These alternatives can meet the goals and objectives for the study.

Develop 4 alternatives that will be fully be evaluated using the Evaluation Matrix developed earlier in the process.

Present the results of the concept plans and evaluation matrix at a widely attended Public Meeting

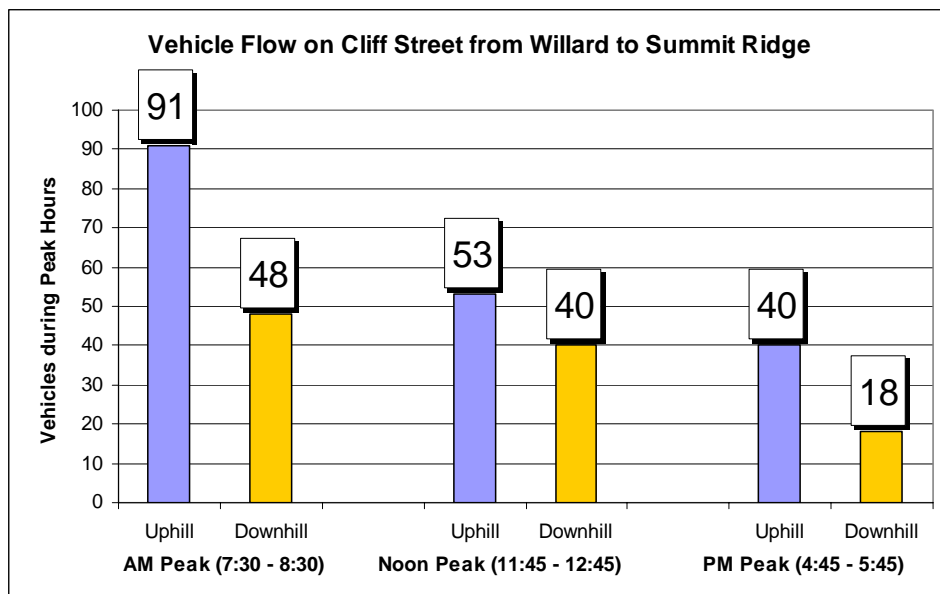


Improvement Alternatives

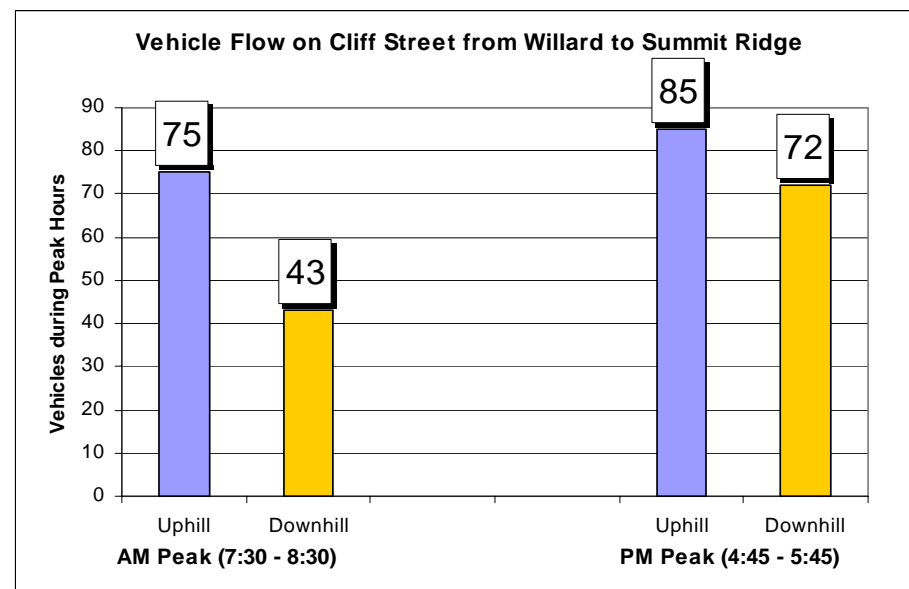
Alt #	Alternative	Two-Way Travel & Keep Parking (existing curb to curb)	Two-Way Travel & Remove Parking	One-Way Travel & Keep Parking	Close Street
1	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
2	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
3	S. Willard to Summit Ridge				X
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
4	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street		X		
	Summit Street to S. Prospect		X		
5	S. Willard to Summit Ridge				X
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
6	S. Willard to Summit Ridge				X
	Summit Ridge to Summit Street		X		
	Summit Street to S. Prospect		X		
7	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street			X	
	Summit Street to S. Prospect			X	
8	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect				X
9	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street		X		
	Summit Street to S. Prospect				X
10	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street				X
	Summit Street to S. Prospect	X			
11	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street				X
	Summit Street to S. Prospect		X		



Moving Forward



January 2007 count



September 2007 count



Moving Forward

- **Each of you has 4 votes.**
- **The top four Alternatives will move forward to the Evaluation Matrix round. These will be presented at a public presentation.**
- **Public Presentation – Vote on the four alternatives to come down to two alternatives**
- **Top 2 Alternatives Further Refined & Presented to Steering Committee**
- **Draft Report and Final Report**



Moving Forward

- 1) Existing curb to curb– throughout**
- 2) Close steep section, 2 way no parking, existing**
- 3) One-way, 2-way no parking, existing**
- 4) One-way, existing, existing**

Nicole Losch, Bicycle/Pedestrian/Environmental Planner

Burlington Department of Public Works

(802) 865-5833 nlosch@ci.Burlington.vt.us

PUBLIC MEETING NOTICE

Cliff Street Mobility Study

What: You are invited to a public meeting to provide input on design alternatives on Cliff Street, between South Willard Street and South Prospect Street.

Your vote matters! Vote on which of the 5 alternatives are presented to the City for future consideration.

5 Alternatives have been developed:

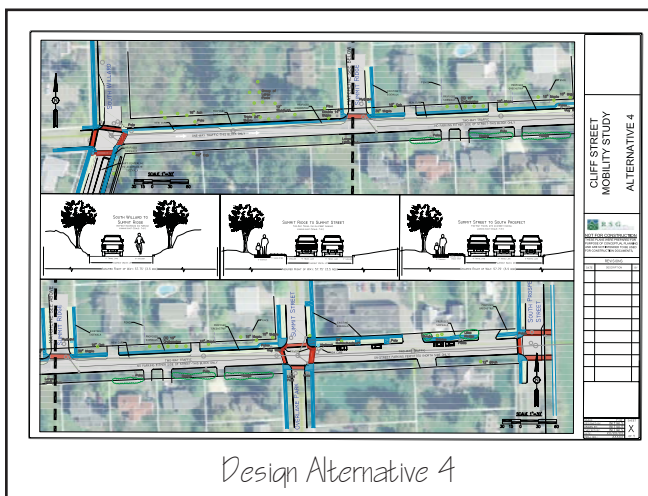
No Build Alternative & 4 Build Alternatives

The No-Build Alternative will maintain existing configuration.

The Build Alternatives present 4 potential street reconfiguration alternatives that meet the stated goals and objectives while minimizing impacts on adjacent property owners.

When: Thursday, November 15, 2007 At: 6:30 p.m.

Where: *Tentative Location (Check website for updates)*
Greek Orthodox Church
at the Corner of South Willard & Ledge Road -
(Location of Ward 6 NPA Meetings)



'Dot-Mocracy' Voting

If you are unable to attend the meeting please contact Nicole Losch at Burlington Department of Public Works to submit questions or comments.

email: nlosch@ci.burlington.vt.us

phone: 865-5833

online: www.dpw.ci.burlington.vt.us/transportation/projects/CliffStreet.php



Cliff Street Mobility Study

Alternatives Presentation: 11/15/07



R | S | G INC.
RESOURCE SYSTEMS GROUP, INC.



H. KEITH WAGNER | PARTNERSHIP
LANDSCAPE ARCHITECTS



Today's Agenda

- 1. Introduction, Overview & Background**
- 2. Study Area**
- 3. Study Process**
- 4. Identified Issues**
- 5. Alternatives Presentation**
- 6. Voting**
- 7. Next Steps**



Study Objective

“Create a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility. The concepts should be constructible and meet all applicable design standards. The plan will enhance the Cliff Street neighborhood and reflect the ‘rural’ characteristics while maintaining its importance as an east-west connection”



Project Overview & Background

- The Cliff Street area has been a concern of the local neighborhood and the City for the last two decades.
 - A petition was signed by 182 people who desired that a sidewalk be installed along Cliff Street between South Willard and South Prospect Streets
 - 2006: CEDO and Ward 6 arranged a series of three meetings where citizens discussed sidewalks on Cliff Street – it became obvious there needed to be a larger planning effort made to address all identified concerns
- The City applied for a Chittenden County Metropolitan Planning Organization 'Transportation for Livable Communities (TLC)' Grant as a means to facilitate the neighborhood process that has shaped the project to date.
- The scope of this project is Cliff Street, between South Willard and South Prospect Streets. We have also included the segment of South Willard Street, between Cliff Street and Deforest Road.



Study Process

- The primary purpose of this study is to provide a process that allows the neighborhood to identify mobility improvements that meet the City's and residents' needs.
- Ward 6 NPA members, CCTA, City staff, and the consultants are the Steering Committee for this project.
- The Local Concerns meeting in April allowed us to assess the community's concerns and receive feedback on possible alternatives.
- The Steering Committee reviewed the identified issues in a matrix prepared by RSG and City staff.
- 11 alternatives were developed to address the identified issues. The Steering Committee selected the 4 alternatives to present at this public meeting.
- Consultants will prepare a final report with greater detail on the top alternative
- Study will conclude by December 31, 2007



Project Process & Definition

PHASE A: Project Definition

- Steering Committee Meeting: *define the goals and objectives*
- Local Concerns Meeting: *define the purpose and need*
- Steering Committee Meeting: *identify potential alternatives*
- **Consultants will prepare preliminary cost estimates and design sketches of final alternative** : *preliminary designs*
- *Steering Committee Meeting: preliminary designs & identify preferred alternative* **Today**
- Preferred Alternative Selection: *consultants final report*

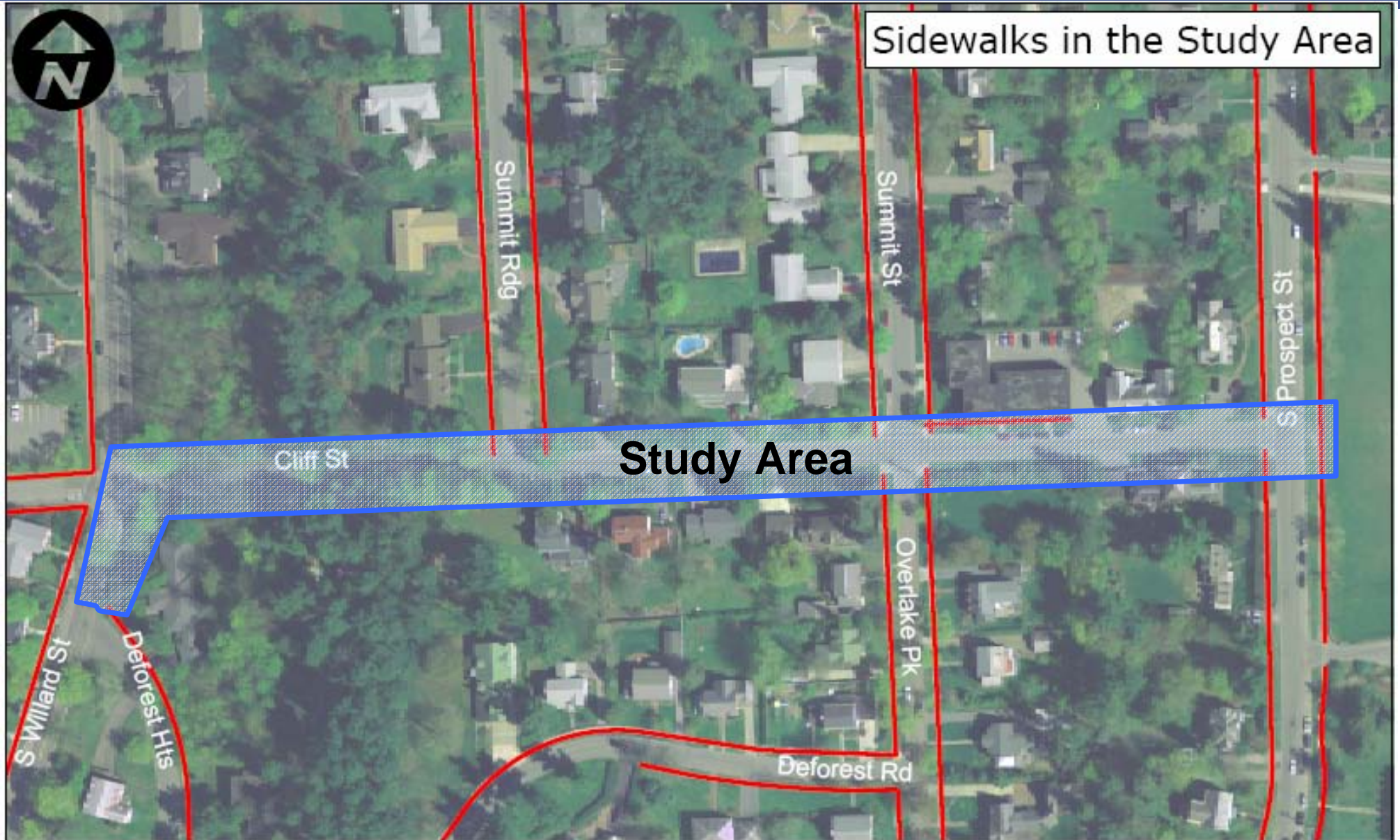
Current Project

PHASE B: Project Design (Utilities, ROW, Permits, Contract Plans)

PHASE C: Construction

- City staff will identify funding sources, which will be influenced by the details within the proposed alternatives

Sidewalks in the Study Vicinity





Identified Issues and Immediate Tasks

No Sidewalk

Have to Walk in the Street

Traffic has Increased

Safety Concern

Poor Lighting

Steep Grades

Drainage Issues

Widening Difficult

Restrict Truck Traffic

Prioritize Improvements

Impacts to adjacent street of re-routed vehicles

Emergency access to neighborhood with street closure/one-way

Evaluate cheap options available that meet our objectives

Keep trees and understand City's arbor plan

Place signs for steep hill

Issues identified to date



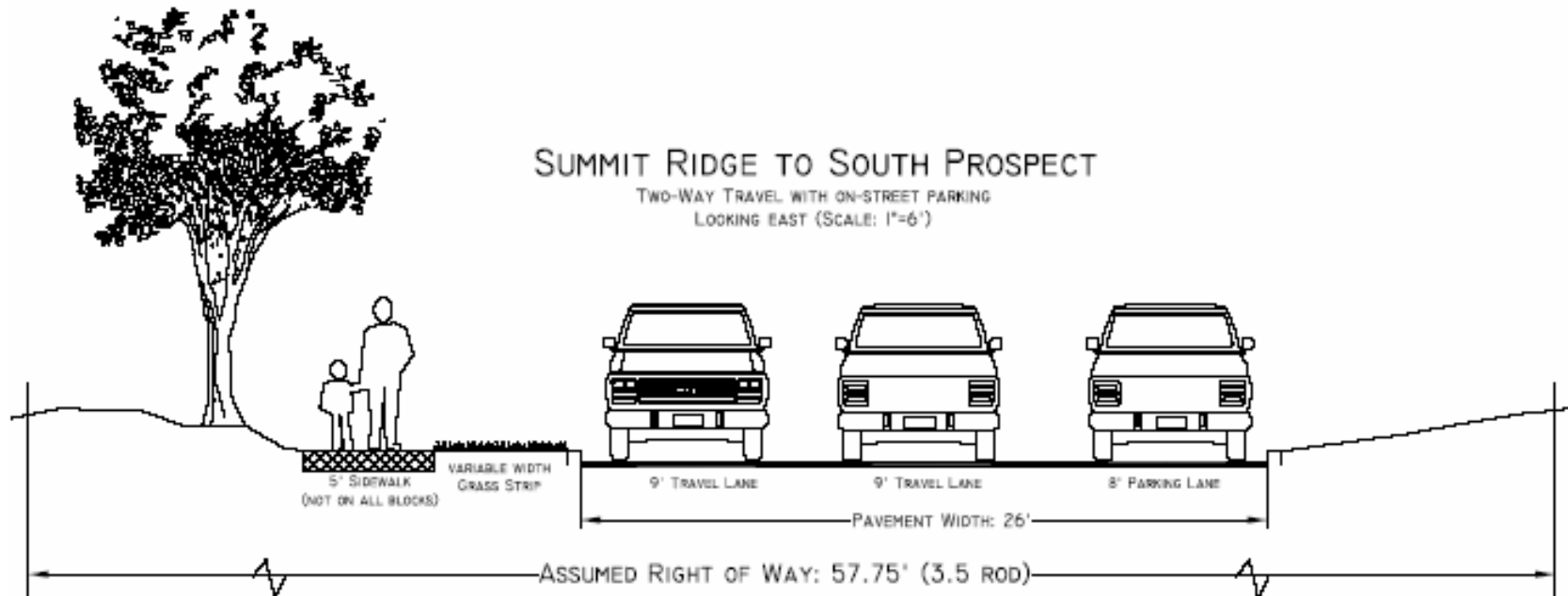
Recent Progress

- **The Steering Committee directed the Consultants to develop a number of different alternatives and consider all potential configurations for each segment.**
- **Collected School year, warm weather traffic data**
- **Developed 11 improvement options that the Steering Committee evaluated.**

Selected 5 alternatives to move on to the evaluation and design concept process. 4 Build alternatives and the No Build

- **Concept Design Drawings developed for the 5 Alternatives**

Improvement Options



**Two-Way
Travel with
parking**

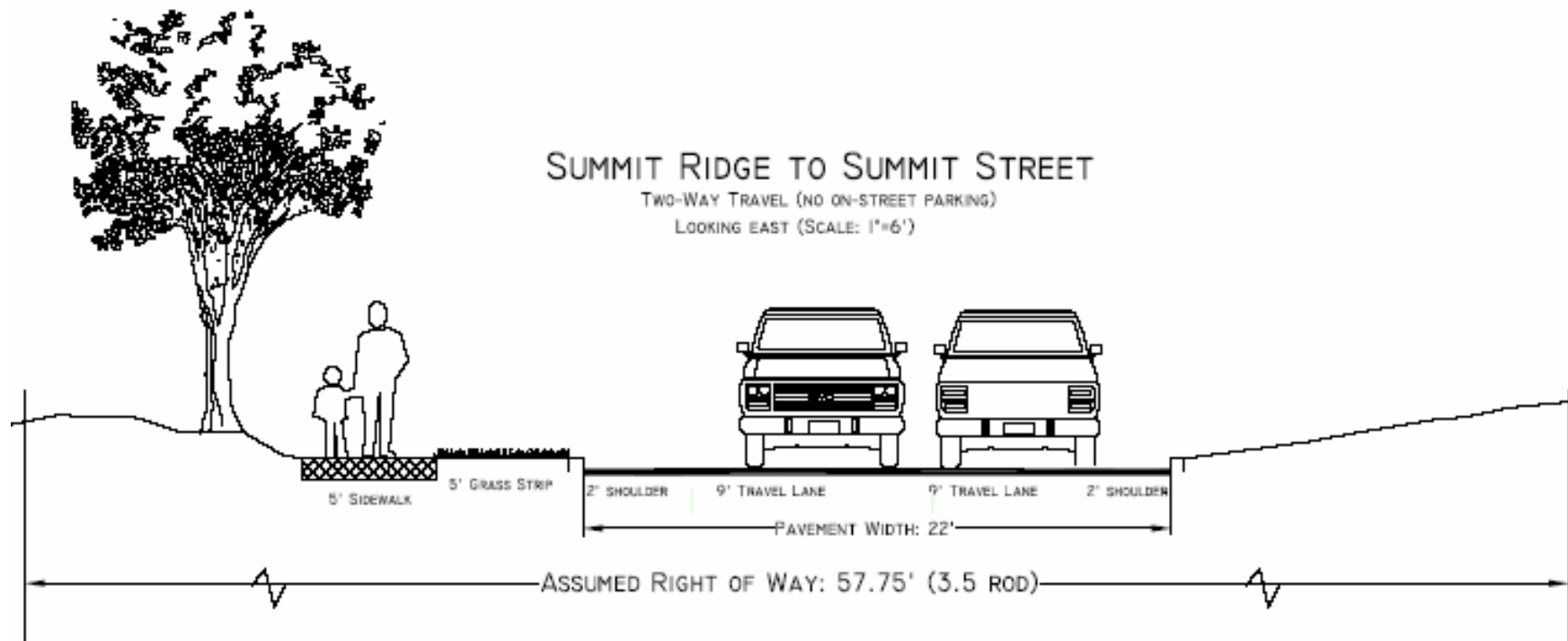
**Two-Way
travel with no
on-street
parking**

**One-Way
Travel**

**Street Closure
to Vehicles**



Improvement Options



**Two-Way
Travel with
parking**

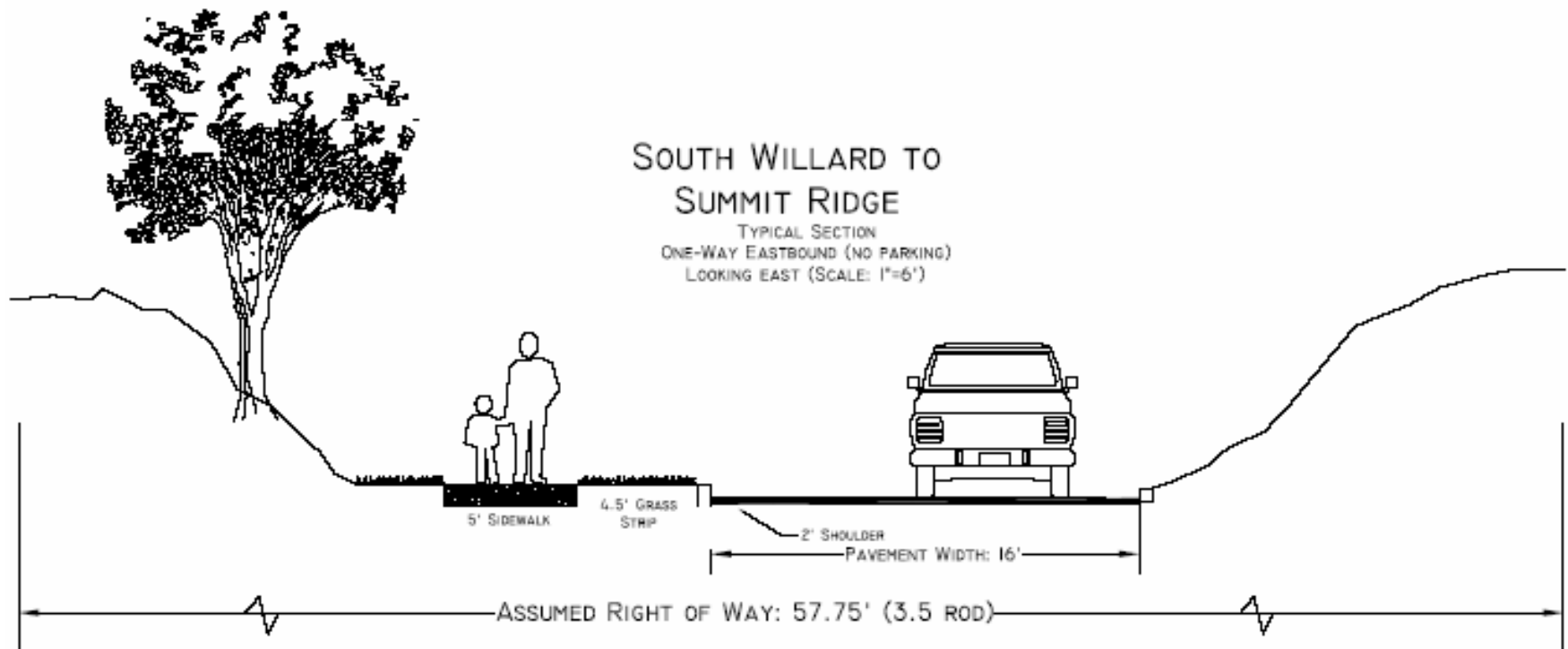
**Two-Way
travel with no
on-street
parking**

**One-Way
Travel**

**Street Closure
to Vehicles**



Improvement Options



**Two-Way
Travel with
parking**

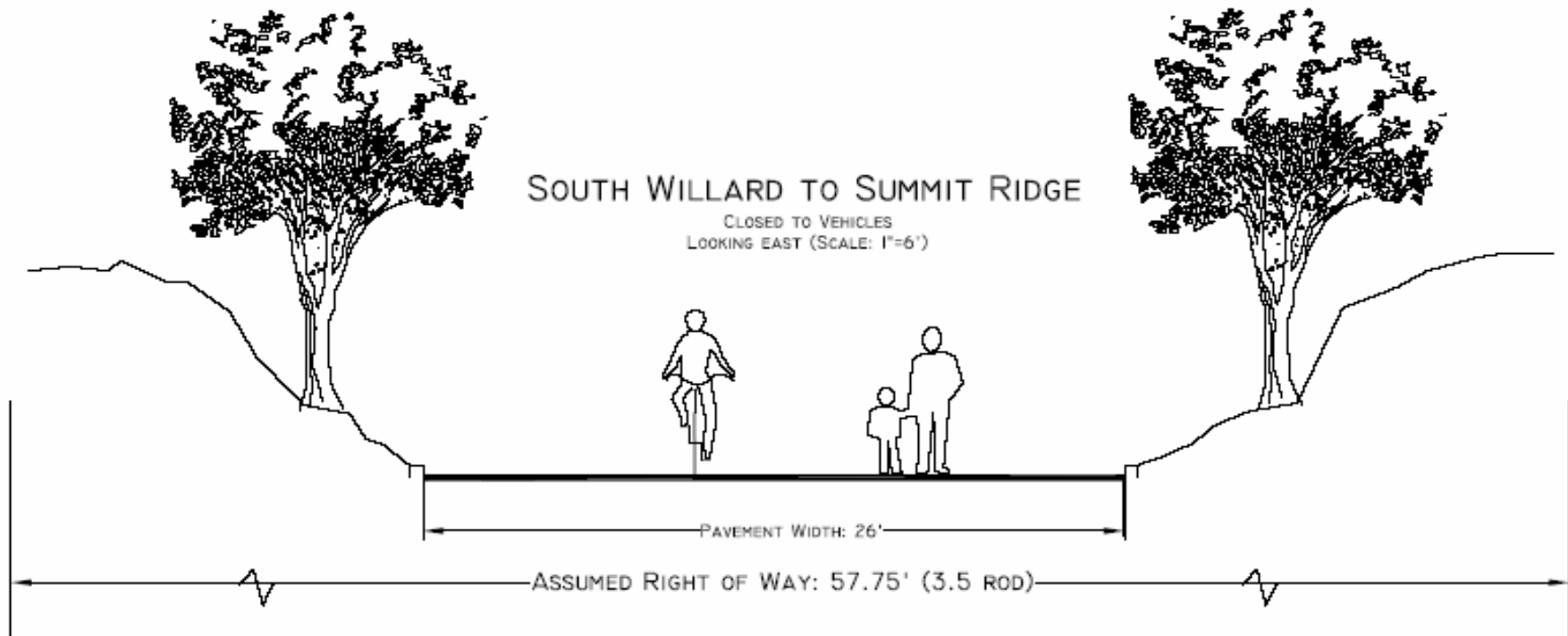
**Two-Way
travel with no
on-street
parking**

**One-Way
Travel**

**Street Closure
to Vehicles**



Improvement Options



**Two-Way
Travel with
parking**

**Two-Way
travel with no
on-street
parking**

**One-Way
Travel**

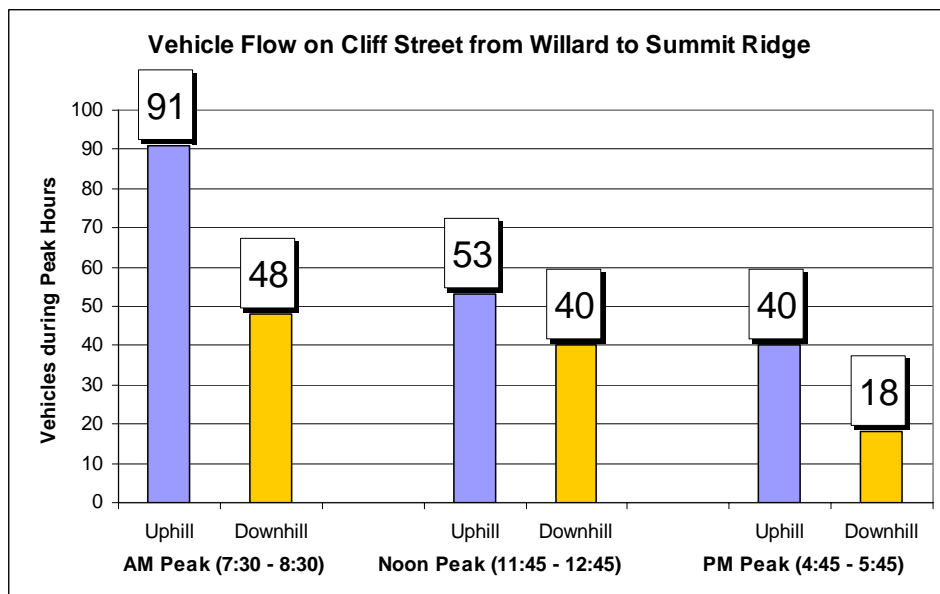
**Street Closure
to Vehicles**

Improvement Options

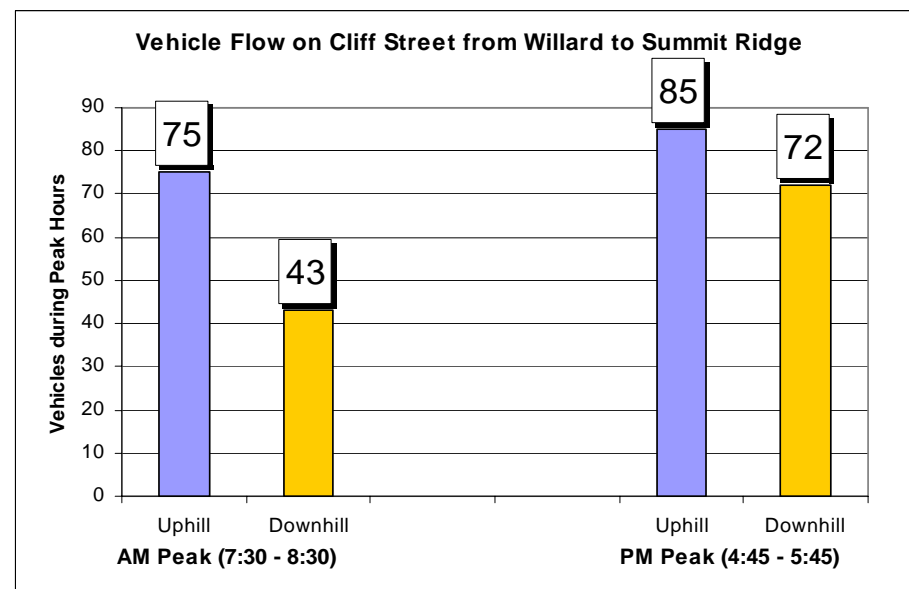
Alt #	Alternative	Two-Way Travel & Keep Parking (existing curb to curb)	Two-Way Travel & Remove Parking	One-Way Travel & Keep Parking	Close Street
1	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
2	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
3	S. Willard to Summit Ridge				X
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect	X			
4	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street		X		
	Summit Street to S. Prospect		X		
5	S. Willard to Summit Ridge				X
	Summit Ridge to Summit Street		X		
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7	S. Willard to Summit Ridge			X	
	Summit Ridge to Summit Street			X	
	Summit Street to S. Prospect			X	
8	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street	X			
	Summit Street to S. Prospect				X
9	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street		X		
	Summit Street to S. Prospect				X
10	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street				X
	Summit Street to S. Prospect	X			
11	S. Willard to Summit Ridge	X			
	Summit Ridge to Summit Street				X
	Summit Street to S. Prospect		X		



Moving Forward



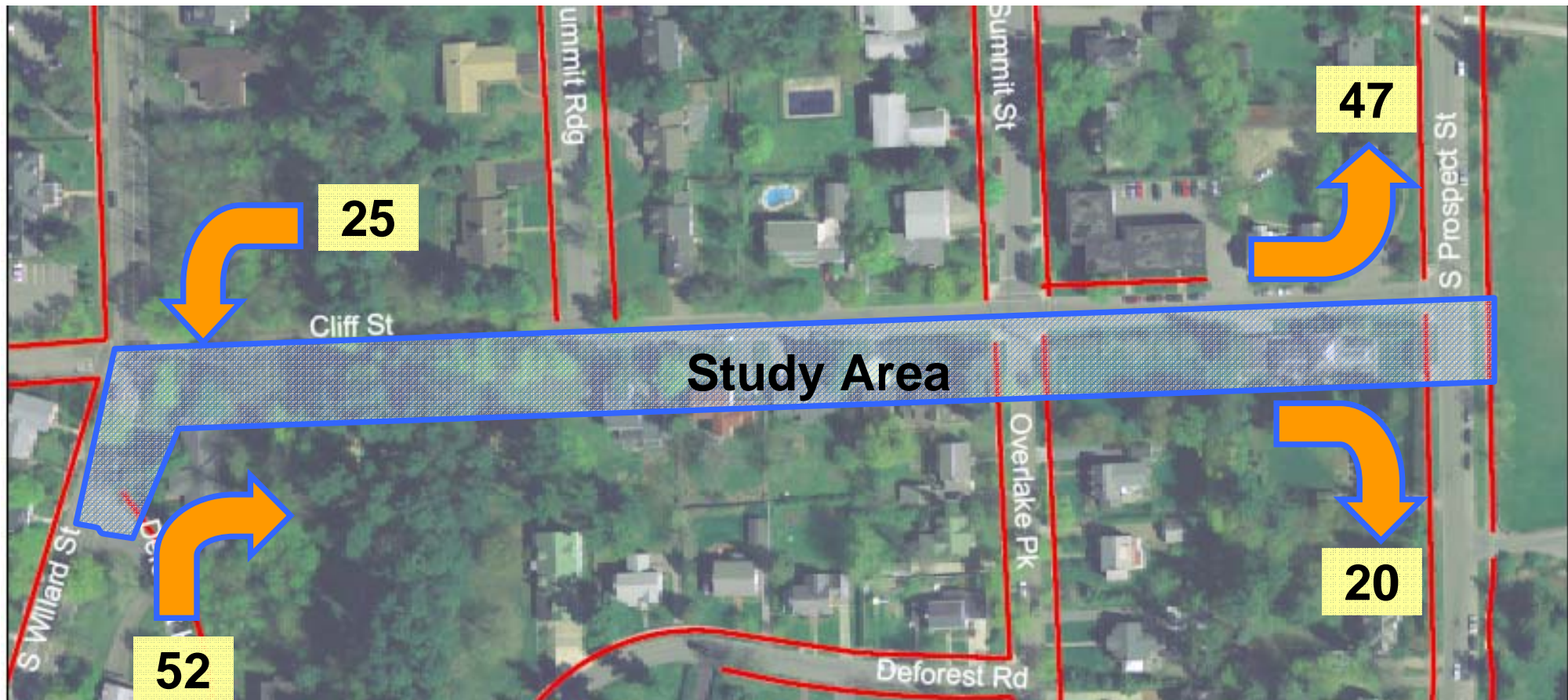
January 2007 count



September 2007 count

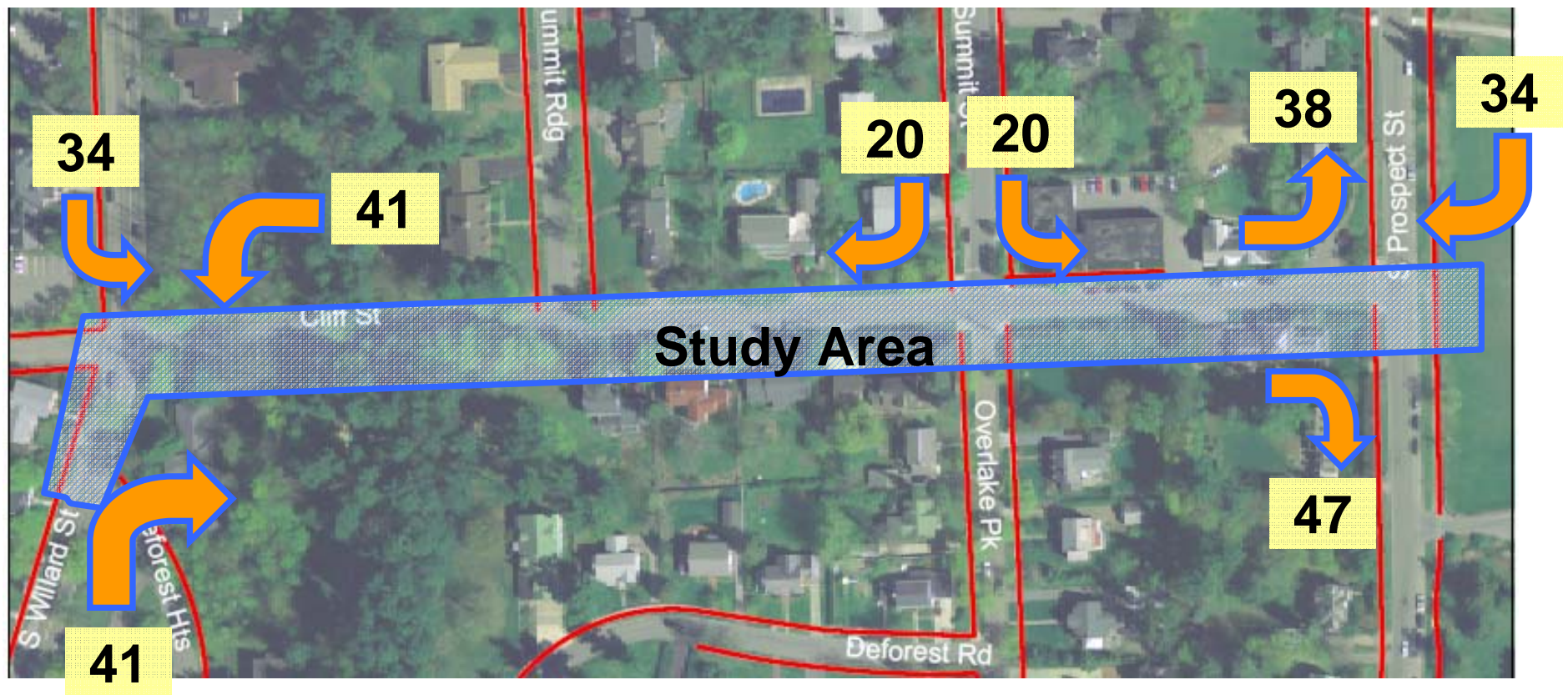


Major AM Traffic Flow





Major PM Traffic Flow





Alternatives

Alternative		Section and Improvement Description		
		South Willard to Summit Ridge	Summit Ridge to Summit Street	Summit Street to Prospect Street
No Build	1	Existing Configuration		
Build	2	Existing curb to curb with sidewalk on embankment	Existing curb to curb with sidewalk north of existing curb line	
Build	3	Close Section to Vehiclular Traffic	Narrow street, two-Way Travel, elminate on-street parking, and place sidewalk north of new curb.	Existing curb to curb with sidewalk north of existing curb line
Build	4	Narrow street, one-way travel uphill.	Narrow street, two-Way Travel, elminate on-street parking, and place sidewalk north of new curb.	Existing curb to curb with sidewalk north of existing curb line
Build	5	Narrow street, one-way travel uphill.	Existing curb to curb with sidewalk north of existing curb line	



Design Alternatives

Alternative 1: No Build

- **No sidewalk**
- **Maintain existing two-way traffic operations with parking allowed on one side.**



Design Alternatives

Alternative 2: Build

- **Maintain 2-way traffic, on-street parking, and existing curb line, adding a sidewalk in the greenbelt on the north side.**
- **Shift the centerline and install a new sidewalk on the eastern side of South Willard between Cliff Street and Deforest Heights.**



Design Alternatives

Alternative 3: Build

- **Close Cliff Street to motor vehicles between South Willard and Summit Ridge; maintain 2-way traffic but remove on-street parking between Summit Ridge and Summit Street, and move the northern curb line south into the existing street to add a new sidewalk and expanded greenbelt; maintain 2-way traffic, on-street parking, and the existing curb line to add a sidewalk in the greenbelt on the north side between Summit Street and South Prospect.**
- **Shift the centerline and install a new sidewalk on the eastern side of South Willard between Cliff Street and Deforest Heights.**



Design Alternatives

Alternative 4: Build

- **Convert Cliff Street to 1-way uphill between South Willard and Summit Ridge, move the northern curb line south into the existing street to add a new sidewalk and expanded greenbelt, and accommodate limited on-street parking; maintain 2-way traffic but remove on-street parking between Summit Ridge and Summit Street, and move the northern curb line to the south to add a sidewalk in the new greenbelt; maintain 2-way traffic, on-street parking, and the existing curb line to add a sidewalk in the greenbelt on the north side between Summit Street and South Prospect.**
- **Shift the centerline and install a new sidewalk on the eastern side of South Willard between Cliff Street and Deforest Heights.**



Design Alternatives

Alternative 5: Build

- **Convert Cliff Street to 1-way uphill between South Willard and Summit Ridge, move the northern curb line south into the existing street to add a new sidewalk and expanded greenbelt, and accommodate limited on-street parking; maintain 2-way traffic, on-street parking, and existing curb line between Summit Ridge and Summit Street, adding a sidewalk in the greenbelt on the north side; maintain 2-way traffic, on-street parking, and the existing curb line to add a sidewalk in the greenbelt on the north side between Summit Street and South Prospect.**
- **Shift the centerline and install a new sidewalk on the eastern side of South Willard between Cliff Street and Deforest Heights.**



‘Dot-Mocracy’ Voting

- **The No Build Alternative will be carried further automatically**
- **You have 1 vote to place on the top Build alternative of your choice**
- **The top alternative will be further refined and Cost Estimates developed**
- **Project Wrap Up and Report**



Contacts

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Resource Systems Group

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<http://www.dpw.ci.burlington.vt.us/transportation/projects/CliffStreet.php>

APPENDIX D

RECORD OF PUBLIC OUTREACH AND COMMENT





KICK-OFF MEETING: CLIFF STREET MOBILITY STUDY

9 January 2007

AGENDA:

- Introductions
- Project Goals and Objectives
- Scope and Work Products
- Schedule
- Public Meetings/Interaction
- Requested Information & Data

PROJECT GOALS AND OBJECTIVES

Develop project goals and objectives

Potential Statement could be the following:

“Create a plan that will provide for safe and efficient pedestrian, bicycle, and vehicle mobility. The concepts should be constructible and meet all applicable design standards. The plan will enhance the Cliff Street neighborhood and reflect the ‘rural’ characteristics while maintaining its importance as an east-west connection.”

REVIEW SCOPE & PRODUCTS

TASKS:

- Task 1: Kick-Off Meeting & Project Management
- Task 2: Existing Conditions Assessment
- Task 3: Local Concerns Meeting
 - Public Meeting Number 1
- Task 4: Alternatives Development

- Review Alternatives with Steering Committee
- Task 5: Alternatives Selection & Reporting
 - Public Meeting Number 2
 - Meeting with Steering Committee
 - Final Technical Memorandum

SCHEDULE:

- Project Completion by September 30th, 2007.
- Next SC meeting
- 1st public meeting data

REQUESTED DOCUMENTS & DATA

- Notes and Minutes from the meetings held by the NPA and CEDO
- Existing CAD, topography, or survey data
- Traffic data
- Assessment of blasting options & opinion from the City
- House Locations from Street
- Tree Locations/Species
- Utilities
- ROW's and Easement information





CLIFF STREET MOBILITY STUDY

Steering Committee Meeting Notes

January 9, 2007

Held at the City of Burlington Department of Public Works
Burlington, VT

In attendance:

Nicole Losch, City of Burlington; Keith Wagner, Carolyn Orben, H. Keith Wager Partnership; Mark Smith, Jon Slason, RSG; John Tuck, Sanjay Sathe, Terry Averill, Barbara Beal, Elaine Katz, Casey Lamont, Jerry Manock; Ward 6 Residents.

Prepared January 9, 2007 by Jon Slason

MEETING NOTES

1. Introduction of the project team and the public in attendance.
2. Discussed the goal and objective of the study. A draft statement was prepared.
 - It was noted that the discussion of mobility in the study should discuss overall mobility from the north end of Summit Terrace connecting to both South Willard and South Prospect. A discussion could be appropriate, but the study is focusing on developing plans for Cliff Street only between South Willard and South Prospect Streets.

3. Discussion of Project Tasks

Task 1: Kick-Off Meeting

Task 2: Existing Conditions

- 26 feet curb to curb, 57.5 foot Right-Of-Way Width.
- Poor pavement conditions
- Inadequate drainage along the street. No catch basins along the steep segment of the street between South Willard and Summit Terrace.
- The Consultants will work with the City to obtain existing traffic data and information regarding easements, utilities, locations of buildings, etc.

Task 3: Local Concerns Meeting

- Should occur Mid-March to early April
- The Consultants described the approach and organization that the first public meeting will take.

Task 4: Alternatives Development

- The Consultants will develop conceptual plans incorporating all comments obtained in Task 3. It is estimated that no more than four concept plans will be developed, each meeting the goals and objectives of the study.
- The alternatives will be presented to the Steering Committee.

Task 5: Alternatives Selection & Reporting

- A final memorandum will be developed after the second public meeting in which two plans will be recommended to the City for their consideration. Each of these two plans will have preliminary cost estimates, based on a planning, order of magnitude scale.
- Study completed no later than end of September 2007.

4. Schedule and Next Steps

- The Consultants will work to develop a base map showing street dimensions, rights of way, utilities, trees, and houses.
- Traffic data including: vehicle volumes, pedestrian count data, and crash data will be obtained.
- Develop schematics for potential improvements to Cliff Street to present at Public Meeting 1.
- Draft technical memorandum documenting existing conditions.
- Hold Public Meeting: Mid-March to early April.





PUBLIC MEETING 1: GROUP LISTENING & BRAINSTORMING SESSION

These notes are the exact notes taken from the group session during the 22 March 2007 Public Local Concerns Meeting.

GROUP 1: RECORDED BY MARK SMITH, RSG

Prioritize and consider Drainage with high importance

What inlets are appropriate

Is there infrastructure to accept stormwater

Simple Foot path (use existing path) vs. sidewalk.

On-road bike accommodations

Get better car and ped counts

Surface material for path?

What are the limitations to grade

- plowing
- walking

can we address the most critical need first – possible phase the project

lighting safety vs. light pollution

urban green space must be considered

consider impacts due to re-routing vehicle

safety of increasing forest inviting loitering

safety of closing street – fire

GROUP 2: RECORDED BY JON SLASON, RSG

Before spending major \$ the city should pursue cheaper options for traffic calming, placing signs that indicate steep hill, limit truck traffic, etc.

Investigate the impacts of underground springs

If one-waying or closing, the impacts on that re-routed traffic must be evaluated

One-way with sidewalk adjacent to the road would minimize the total cost and amount of infrastructure

Keep the good trees, be consistent with the City's arbor plan [can the consultants get this?]

Summit Ridge is concerned with the impacts for them if the Cliff street section between S. Willard and Summit Ridge is one-way.

Bicycle Traffic – proper accommodations

Utility relocation – underground if possible. Make space in the green-belt for this.

Sidewalks on South Willard between Deforest Road and Cliff Street is a primary concern. Currently listed as a Safe Route to School – and there is no sidewalk or marked crossing.

Drainage costs must be shown in the alternatives

Truck Traffic – Routes evaluated. Signage for trucks should be placed to eliminate trucks from using the route.

Place signs for autos and pedestrians noting a Steep Hill –

Improve pedestrian safety through the intersections of Cliff & S. Willard and Cliff & S. Prospect. Especially where no sidewalk exists at the Cliff & S. Prospect intersection to continue on Cliff Street

No sidewalk as a separate facility. Place it on the road, put Bollards, or other kind of barrier on the road. Make the road one-way uphill. Safer, and already people make that movement.

Create alternative pedestrian routes through Champlain College. These should be designated and marked as such.

Create the easiest piece first. Can we build a sidewalk between Summit Ridge and South Prospect.

Reason for Coming Tonight:

Sidewalk between Cliff Street on South Willard to Deforest Road

Make Cliff Street “A good place to be”

Want to walk safely on Cliff Street. Currently experience fear walking along the street both night and day because of the vehicle traffic.

Concerns for traffic impacts on adjacent streets





R | S | G INC.
RESOURCE SYSTEMS GROUP, INC.

COMMENTS RECEIVED ON THE CLIFF STREET MOBILITY STUDY REGARDING THE LOCAL CONCERNS PUBLIC MEETING 1

I'm not able to attend the Cliff St meeting, but I think adding a sidewalk would be a great idea. It's sorely needed. I would vote to continue the existing sidewalk along the North side of Cliff St down from existing terminus to connect to South Willard.

Another issue for me a few feet from that intersection is South Willard and Deforest Heights. The crossing there isn't at an intersection with a stop sign. When my kids walk to school, they are forced to cross an intersection with no stop signs, and they need to dodge the cars as they cross. I would like to see an improvement made to this intersection too as part of the Cliff St project 20 feet away. Perhaps something as small as a speed bump, stop sign or crosswalk would make a difference. They shouldn't have to risk their lives getting to school every day.

Hi,

I have lived in Burlington since 1976. I think it is foolish to spend money on making a sidewalk on Cliff Street. It is very steep and would be full of snow or ice often. Let people walk one block further north or south to walk east or west.

I've pasted below an email I just sent to our Neighborhood Forum this morning. I'd also add the following link to my proposal: <http://www.homeandabroad.com/viewSiteDetails.ha?mainInfoId=40114> which takes you to a San Francisco 'landscaped steps' site.

There's also a website (Project for Public Spaces) that you should add to the discussion:
http://www.pps.org/imagedb/category?gallery_id=926

To the extent that we pride ourselves as a cosmopolitan and world-class city, there are many, many more examples of such urban steps in cities around the world that have steep slopes that are impractical or dangerous for motorized traffic to negotiate and maintain. (Like Cliff Street)

As I tried to meditate my way out of an evening headache last night while trying to drift off to sleep, I had this vision of an idea what to do with the block of Cliff Street between South Willard and Summit Ridge (the dead end street, at the top of the wooded block). Here it is. Ready?

Return that block back to close to its original state, and into a walking park, with switchbacked stairs and a couple of landings with benches amidst landscaped rock gardens and small to medium sized shade tolerant trees. Think a naturalized Roman Steps cum San Francisco's Lombard Street.

Here's an image that's close, but not exactly what I had in mind:



There's no good reason to try to maintain this very steep, very treacherous, fast water-shedding and freezing slope as a road. It would leave no ones property stranded as far as I can tell, and before [neighbor] calls me up to Chasstize me, I'd recommend retaining a small spur of the old roadbed up far enough to allow proper access to his stone steps for delivery trucks and parking of his car. It might even be possible to regrade that spur to a more reasonable pitch as part of this project.

I'm not sure why this block was cut out of the ledge to make way for a road--this does not appear in many older city maps--and I'm trying to think whether there is any major reason why someone living on Summit Ridge would find it extraordinarily inconvenient. In fact I would think it would increase their property values along with other homes in the neighborhood.

Anyway, that's not up to me to opine--I'm eager to hear from folks about this idea. Including DPW.

I finally fell asleep and woke up this morning, refreshed with no sign of a headache!



Please take a look at the Edmund's Safe Routes to School map, published by Burlington Public works. The area marked in pink, E of S. Willard, and S. of Cliff St, shows a "Safe" crossing at Deforest Rd and S. Willard. At this point pedestrians have to negotiate traffic speeding up to the stop sign at Cliff St from Shelburne Rd., there is no side walk on the E. side of S. Willard, and parked cars on the W. side of S. Willard. The Deforest Rd. intersection is "blind" to traffic coming into the city. In winter there is also an ice problem, water seeps out of the ground, freezes, and covers the sidewalk and road, on Deforest Rd. This winter the snow banks are so high that pedestrians have to walk on S. Willard St. to Cliff St to access a sidewalk.

This problem has been recognized and addressed by Public works, who proposed a sidewalk on the E side of S. Willard between Cliff St. and Deforest Rd. This would allow pedestrians to cross at the Cliff St junction. However, after committing to do this in spring 2005 and 2006, public works have still not carried out the work.

This has been a concern to me because my daughter walks to Edmund's every day, and has to negotiate this dangerous crossing. I was very surprised to see it marked as a safe crossing point on your map.

I hope that Public Works will carry out their plan for this crossing soon, but if work goes ahead on Cliff St, before this is done, it should be incorporated in the Cliff St project.

My wife Mary and I live at [on cliff street]. We have lived here for over 30 years and intend to age in place here on the hill. We are very interested in improving both the safety and mobility of Cliff Street. We regret that we can not come to the meeting on the 22nd as we will be out of town that week.

Cliff Street is a serious hazard to pedestrians, particularly in winter. The section between Summit and South Prospect is the most dangerous as there is absolutely no place to walk except in the ice filled street with cars/trucks/buses turning on to Cliff from South Prospect. I see no solution to that section of Cliff other than a sidewalk. The sidewalk could be either on the north or the south side of the street.

The section of Cliff between Summit and Summit Ridge could also benefit from a sidewalk although I understand the concern of some of our neighbors that this might require taking out some lovely trees that now add a lot to the beauty of the street. A sidewalk on the north side would be more practical.

The section of Cliff between South Willard and Summit Ridge poses particular problems. The ledge rises sharply from the road on both the north and south sides. Years ago there was a footpath in the trees along the north side that kids would take to school but I don't think it is now passable. Our property is on the south side of this section and while we would be open to having a sidewalk built on the south side I doubt that this is a practical solution because of the terrain.

Another option for the sections between South Willard and Summit would be to designate the street one way (going up) and then mark off a lane of the street as only for bikes and pedestrians. Prohibiting trucks and posting a speed limit would be critical. A pedestrian lane on the south side of the street could be plowed in winter like a



sidewalk (it would fill with ice otherwise). This one way/pedestrian lane solution would be much less expensive than a sidewalk and have, I think, much more support from the neighborhood.

Thank you for your work on this important project. We will also be meeting with the consultants at RSG to give them our input.

I'm writing re the potential changes/improvements to Cliff St.

While there is no argument a sidewalk would definitely constitute a practical and aesthetic improvement for Cliff St., I would argue there are more pressing issues in the immediate area, such as the long standing, ongoing deterioration of the curbs and sidewalk on the lower part of DeForest Rd.

Also, for many years now, the corner where De Forest meets S. Willard represents a seriously dangerous crossing for foot traffic, especially for children who need to use that route on their way to school. There is a particular section, originating approximately at the Lisman Residence on De Forest Road, where water from storms/snow flows down and freezes over, forming a downhill pathway of solid ice. Also, the corner lacks any marking for a crosswalk, which would provide at least a minimum of safety. I do know residents have been asking for relief from this hazard for many years, but as yet, nothing has been done.

Also, the entire lower section of DeForest Rd. and its curbs are in a sad state of neglect and disrepair. Again, this has been a long standing problem, with the answer to queries always being met with "there is no money" to ameliorate the acknowledged problem.

Therefore, I would suggest that residents would be more practically served by first addressing the more immediate problems, like those I have mentioned. Once this is accomplished, it would then be appropriate to think in terms of "improvements."

I know you are attempting to give everyone a chance to be heard, and I also know it isn't an easy task. So, thank you for taking the time to read this.

I was unable to get to the meeting at Champlain College this evening regarding Cliff Street. I walked to another meeting, and I have to say that I am dismayed that the city is thinking about building more sidewalks when the existing ones are in such sorry shape. I have walked Cliff Street on numerous occasions and had no difficulty. Of course I had to walk in the street, but the streets are in pretty good shape and the traffic was always very light.



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Walking Maple or Prospect or College Street sidewalks this week is quite another matter. While the streets are clear and dry, the sidewalks have many treacherous icy stretches. Only the fit with good balance can pass safely. And don't get me started on those pesky street lights that wink on and off all night long.

Please forget about fixing Cliff Street until you have the resources to take care of existing sidewalks.

Thanks for listening.

Although my husband and I will be out of town March 22, we'd like to add our voice of support for a sidewalk on Cliff Street. We moved to Overlake Park because of its proximity to town and walk daily (at least once) to Church Street. Although there are alternative routes, Cliff Street would be a welcome addition. Also, we're often at the UVM Recital Hall at Redstone, making our way back in the dark without benefit of sidewalks for part of the stretch.

Thanks for anything you can do to further this project; I regret we will not be at the meeting in person to show our support.

After reading some of the information re ideas being put forth, and a group being formed to address the possibility of closing off Cliff St. at the Summit Ridge juncture, I am hoping there will be a great deal more discussion before any action is officially agreed upon or taken.

In addition to any traffic studies, I also think it is imperative that the residents who would be directly affected (on Cliff, Summit/Overlook, S. Prospect, S. Willard and De Forest) would, at the very least, be officially consulted and polled in writing as to their concerns and wishes in the matter.

Hi, Two folks from our Ward have recently brought this to my attention too. I'm not sure I can make the meeting on the 22nd (?) I do want to voice concerns too. It is such a steep hill that I fear a sidewalk actually will make it even more dangerous for drivers as more pedestrians use it. I'd love to hear a traffic safety person comment. I understand why residents might want it but am very unsure if its the right space for increased pedestrian traffic because of the steep incline and lack of view driving down the hill. It might be a false sense of security because there is a sidewalk.

My 2 cents: I deliberately walk UP Cliff Street to Summit St. because I want the exercise challenge. I generally feel pretty safe on the hill, but I admit there's nowhere for me to go when cars go by, so I'm pretty careful and mindful of what's coming and going. I would feel a lot safer if I had a sidewalk to use. On the other hand, I rarely see others walking there - is that because there's no sidewalk or because no one would use it anyway because of the steepness or it's not convenient? -

I agree that closing that street would be a problem for the increased traffic on the surrounding streets, so I don't care for that idea.



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I'm not averse, myself, to simply adding a sidewalk. I'm not sure that it will greatly increase pedestrian traffic there. Angle of incline & visibility issues as they are, I still take my chances on that street rather than walk far out of my way to another alternative (even at night, with reflective clothing). My own preference would be to add a sidewalk for pedestrians and leave the street open to vehicular traffic as well.

If I am in the minority with this opinion, might another option be to change it into a one-way street with a good sidewalk? Then at least some of the auto traffic could still benefit from it - causing a bit less of a resulting burden on the surrounding streets. And pedestrians would have safer passage than they do now.

[neighbor]idea is great, for a formal survey to be offered so that folks who live on the affected streets (Cliff, Summit/Overlook, S. Prospect, S. Willard and DeForest) could weigh in even if they are not able to attend the meeting on March 22nd.

We will be out of town and unable to attend the meeting, and appreciate representation from the DeForest neighborhood by others. I am concerned about the pedestrian safety issues on Cliff Street and on DeForest Road. My hope is that whatever action is taken will not divert traffic to DeForest Road.

Hello,

Unfortunately, I can't make the meeting on the 22nd. However, I am so enthusiastic about possible improvements to Cliff Street that I want to express my support. I have long been concerned about the lack of a sidewalk down to South Willard, as that is the way that we walk to the bus stop on South Union. I have the same concern when I'm driving, as people are forced to walk in the street. The street is simply not wide enough for a parking lane, two traffic lanes, and pedestrians and bike riders. The diagram on the flyer looks very promising.

Another problem that I'd like to call your attention to is the water that flows from around the fire hydrant on the east side of Summit Ridge and crosses the street and flows down Cliff. In the winter, this freezes, creating hazards for drivers and pedestrians.

Thank you very much for working on this situation.

Hi

I live on Robinson Parkway. I signed the petition to see a crosswalk put down Cliff St. I wish I had not signed it. I think the project will be too expensive when there are other higher needs in the city. Cliff St. borders other area streets that can be easily accessed. If it was close to downtown and used by many people I would feel differently. I feel strongly that this project not cost us anymore money.





CLIFF STREET MOBILITY STUDY

Steering Committee Meeting Notes

April 4, 2007

Held at the City of Burlington Department of Public Works
Burlington, VT

In attendance:

Nicole Losch, Norm Baldwin, Corey Line, City of Burlington; Mark Smith, Jon Slason, RSG; John Tuck, Sanjay Sathe, Mary Wilmuth, Bryan Higgins, Barbara Beal, Elaine Katz; Ward 6 Residents.

Prepared April 23, 2007 by Jon Slason

MEETING NOTES

1. Recap of Public Meeting 1

- RSG handed out copies of the statements that were recorded during the Public Meeting 1 breakout groups.
- Specific comments from the Steering Committee related to whether all comments during the public meeting made it to these electronic notes. Bryan Higgins was concerned that an option that includes not building a separated sidewalk facility was not specifically mentioned.
- RSG summarized some of the primary issues that were raised prior to the public meeting and the list of additional comments that were noted during the public meeting.
- Truck Traffic along Cliff Street was discussed at length. It was clarified that though Cliff Street is not a 'truck route' it can be used by trucks to make local deliveries if the truck driver deems that Cliff Street is the most direct route. The City DPW said they would look into placing a 'No Through Trucks' sign on Cliff Street.

2. Street Alternatives to be considered in the Evaluation Process

- RSG consolidated the comments made during the Public Meeting and compiled the suggested analysis scenarios. The Steering Committee preferred to see that all options are analyzed for each major road segment, however closure was seen as inappropriate for the upper portions, since traffic would then rely heavily on the steep lower section.. Accordingly the options were modified, as follows:

- i. South Willard Street to Summit Ridge

1. Option 1: Maintain Existing Curb-to-Curb: Place a sidewalk somewhere north of the existing north side curb. Maintaining two-way flow would be assumed.
 2. Option 2: One-Way Traffic: The curb-to-curb width would be narrowed to restrict traffic to one-way flow. A sidewalk would be placed on the north side of the street.
 3. Option 3: Closure of the Street: Close the street to vehicular traffic. Convert the public right-of-way to an area that could support mobility by stairs or a narrow ped/bike walkway.
- ii. Summit Ridge to Summit Street/Overlake Park
1. Option 1: Maintain Existing Curb-to-Curb: Place a sidewalk somewhere north of the existing north side curb. Maintaining two-way flow would be assumed.
 2. Option 2: One-Way Traffic: The curb-to-curb width would be narrowed to restrict traffic to one-way flow. A sidewalk would be placed on the north side of the street. Alternatives could show maintaining or removing the on-street parking.
 3. Option 3: Removal of On-Street Parking: Narrowing the street curb-to-curb by removing the on-street parking. The sidewalk improvements would be placed along the north side of the street.
- iii. Summit Street/Overlake Park to South Prospect Street
1. Option 1: Maintain Existing Curb-to-Curb: Place a sidewalk somewhere north of the existing north side curb. Maintaining two-way flow would be assumed.
 2. Option 2: One-Way Traffic: The curb-to-curb width would be narrowed to restrict traffic to one-way flow. A sidewalk would be placed on the north side of the street. Alternatives could show maintaining or removing the on-street parking.
 3. Option 3: Removal of On-Street Parking: Narrowing the street curb-to-curb by removing the on-street parking. Two way flow would be maintained. The sidewalk improvements would be placed along the north side of the street.



3. Evaluation Matrix

- RSG will develop an initial evaluation matrix that will guide the evaluation process of any street design alternatives. The matrix will be a basic format that will have a number of potential metrics to ensure the design meets all goals and objectives of the study.
- The Steering Committee suggested that RSG develop the matrix as early as possible so that it can be distributed to the community and the NPA to have buy-in on the evaluation criteria. It was specifically noted that metrics include the environmental implications of the designs, such as increased impervious surface, and reduced tree cover, etc.
- The evaluation matrix should be completed by Mid-June to allow for the designs to be evaluated prior to the next steering committee meeting and Public Meeting #2.

4. Public Meeting 2

- The Public Meeting #2 should be scheduled sometime in mid-July to satisfy demands of the project schedule.
- The Steering Committee will meet prior to Public Meeting #2 to review the evaluation criteria ranking that the Consultants performed. The Steering Committee will select the design alternatives that will be presented at Public Meeting #2.

5. Next Steps

- The Consultants will begin the analysis, drafting, and evaluation of the street design alternatives mentioned above. The designs shall be completed no later than end of June.
- The Consultants will develop a draft evaluation matrix for the Steering Committee to work from, and obtain additional comments. The matrix shall be completed no later than mid-June.
- The DPW will meet with the Steering Committee prior to Public Meeting #2.
- The DPW will schedule the Public Meeting #2 to occur sometime in mid-to late July.





CLIFF STREET MOBILITY STUDY

Steering Committee Meeting Notes

October 4, 2007

Held at the City of Burlington Department of Public Works

Burlington, VT

In attendance:

Nicole Losch, City of Burlington; Jon Slason, RSG; John Tuck, Sanjay Sathe, Mary Wilmuth, Ward 6 Residents, Meredith Birkett, CCTA.

Prepared October 10, 2007 by Jon Slason

MEETING NOTES

1. Introduction and purpose of meeting

- RSG presented the current status of the project is to develop four alternatives that will be evaluated using the evaluation matrix created in the last phase of work.
- The purpose of the 3rd steering committee meeting is to narrow down the many configuration design options and select four alternatives that will be presented to the public.
- The project options are A) Do Nothing or B) Construct a sidewalk from these design alternatives.
- The decision to install a sidewalk is not the topic of discussion today. The meeting today is setup to move forward under the scenario, "if a sidewalk was to be installed along Cliff Street, what will the street look like."

2. Street Alternatives to be considered in the Evaluation Process

- The Steering Committee evaluated numerous options for reconfiguring traffic flow, parking areas, and green strips along Cliff Street from South Willard to South Prospect.
- Numerous combinations of roadway alignments were developed that combines the following five cross-section options for the three segments of the street:
 - i. Maintain 2-Way Traffic and on-street parking
 - ii. Maintain 2-way traffic and remove on-street parking
 - iii. Convert to 1-way traffic and keep on-street parking
 - iv. Convert to 1-way traffic and remove on-street parking

v. Close street

- The steering committee discussed the options for Cliff Street with a sidewalk and developed the following four alternatives for Cliff Street:
 1. Alternative 1
 - **South Willard to South Prospect:** Maintain 2-Way Travel, keep on-street parking.
 2. Alternative 2
 - **South Willard to Summit Ridge:** Closed to vehicles.
 - **Summit Ridge to Summit Street:** 2-way travel, no parking.
 - **Summit Street to South Prospect:** 2-way travel with on-street parking.
 3. Alternative 3
 - **South Willard to Summit Ridge:** 1-way uphill
 - **Summit Ridge to Summit Street:** 2-way travel, no parking
 - **Summit Street to South Prospect:** 2-way travel with on-street parking.
 4. Alternative 4
 - **South Willard to Summit Ridge:** 1-way uphill
 - **Summit Ridge to South Prospect:** 2-way travel, with on-street parking
3. Public Meeting 2
 - The second public meeting will occur in early November. The City will work with the NPA to schedule an appropriate time and location.
 4. Next Steps
 - The Consultants will develop concept plans for the four alternatives to be presented at the second public meeting.
 - The Consultants will evaluate the four alternatives based on the evaluation matrix developed by the Consultants, City, and the steering committee.





PUBLIC MEETING 2

15 November 2007

Nicole Losch provided an overview to the project and the process that had been conducted to date.

Jonathan Slason presented the study summary and review of each of the five project alternatives.

Comments were recorded throughout the presentation as follows:

- Sidewalk would be significant benefit for walking to school. ~25 children would be using this sidewalk everyday.
- Is the project goal consistent with the City's goal to build a sidewalk on at least 1 side of every street?
- How come there is no speed limit sign?
- Alternative 3: How would a snow plow turn around?
- If parking is removed, what accommodations would be made to replace the parking?
- Tree canopy is unique here. There is wildlife here; wildlife moves across the area all day long. It would be tragic to the squirrels. "Don't pave a paradise and put up a parking lot."
- Need a woodland path instead. City is responsible for ADA compliance for all city infrastructure.
- Diversion of traffic will affect many that are not in the meeting room.
- Street closure may create a negative effect by isolating pedestrians
- If street closure is an option, why not test it first?
- Someone who lives on Summit Ridge had said that noise from students do not bother them.
- Were there parking survey's done regarding the utilization and location of parking demand?
- "I am disturbed ¾ weekends & my car has been vandalized." [when discussing the issues of adding more pedestrians to the street]
- Why hasn't there been lighting put on the street and other efforts to improve safety such decreasing the speed limit?
- Alternative 4: Will some people ignore the one-way sign?
- Alt 4: Will some people encounter a plow coming down the hill?

- Alt 5: Why was the 2-way no parking not a solution for the South Willard to Summit Ridge section?
- “Many more people would have been here but weren’t notified”

The Dot-Mocracy voting was conducted. Residents of upper Cliff Street (Willard to Prospect) were given red dots, while non-Cliff Street residents were provide blue dots. The results from the Dot-Mocracy voting were as follows:

Table 1: Dot-Mocracy Voting Results

	Blue	Red	Total
Alternative 2	9	1	10
Alternative 3	1	2	3
Alternative 4	8	4	12
Alternative 5	2	0	2

